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United States Department of Agriculture

Soil Conservation Service

Bozeman, Montana MONTANA STATE LERBARY

# Montana Water Supply Outlook



May 1, 1988

MONTANA STATE LIBRAL.

1515 E. 6th AVE.

HELENA, MONTANA 59620





### Foreword

#### How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are terms reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

#### For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209.

#### Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resouces, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

# Montana Water Supply Outlook

and

Federal - State - Private Cooperative Snow Surveys

#### Issued by

Wilson Scaling Chief Soil Conservation Service Washington, D.C.

#### Released by

Glen H. Loomis State Conservationist Soil Conservation Service Bozeman, Montana

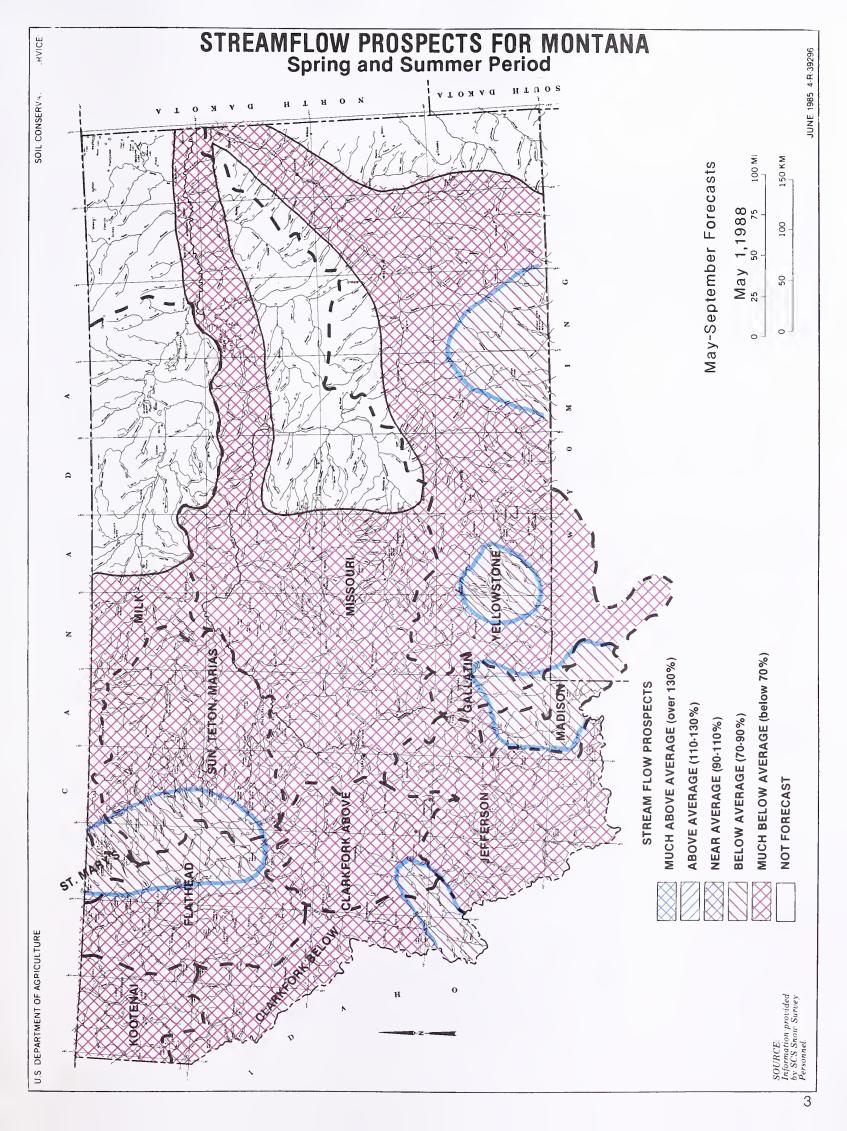
#### Prepared by

Phillip E. Farnes Snow Survey Supervisor Soil Conservation Service 10 E. Babcock Bozeman, Montana 59715

Programs and assistance of the United States Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin.

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### **General Outlook**

Some areas in Montana will be facing shortages of water supplies for irrigation and other uses later this season. Contact your local Soil Conservation Service office for current snowpack and precipitation data and for assistance in operating with a reduced water supply.

### Summary

Snowmelt during April was a little more than normal and snowpacks are now about 60 to 70 percent of average. April precipitation in the mountains was about average in the south and below average in the north. Runoff during the month was very near average over the western half of the State. Most west-side reservoirs have below average storage while others are generally at near or above average levels. Streamflow forecasts for May through September runoff are well below average in all areas. Water shortages are expected to be quite common after mid to late June.

### Snowpack

Snowpacks increased until about mid-April then started to melt. Some showed slight increases near the end of the month. Almost all snow courses have lower May 1 water contents than were measured on April 1. All areas have below average snowpack with most areas showing water contents in the 60 to 70 percent of average range. Considerable melt at low and mid-elevations has reversed the trend of previous months where lower elevation snow was at a higher percentage than at higher elevations.

### Precipitation

Mountain precipitation was generally below average in northern watersheds, about average across the central part of the State and above average in southern areas. Areas east of the mountains and in most mountain valleys reported below average April precipitation. May and June are normally the wettest months of the year. The amount and timing of precipitation during these months as well as July and August will be very critical in determining the impacts of this year's deficient snow accumulation.

### Reservoirs

Most reservoirs showed some increase in storage as a result of April runoff. Most west-side reservoirs continue to show below average storage. Those in the Missouri River Drainage vary from below average to above average storage with the majority in the near to above average range. A few will probably not fill this year due to reduced inflows and downstream demands for water.

#### Streamflow

Runoff during April was near average over the majority of the State. This is a result of adequate precipitation and above average melt. Forecasts increased slightly in the southern half of the State and decreased slightly in the northern half. However, there will be less runoff to come in the following months as a result of the near average April runoff. Unless May and June are abnormally dry, this should be enough water for most users until mid to late June. At that time, water shortages are expected to be quite common until the end of the irrigation season.

#### Soil Moisture

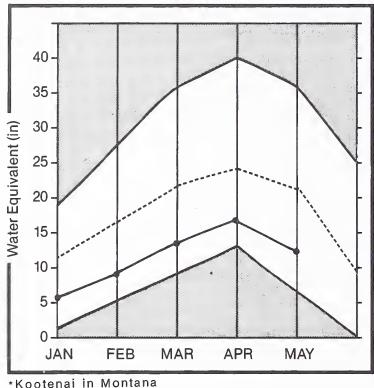
Mountain soil moisture levels have improved as a result of snowmelt and rainfall absorption. However, there still appears to be some moisture shortages in the deeper zones in most areas. Some valley areas are being irrigated earlier than normal to replenish soil moisture levels.

# Peak Snowmelt Flows

Estimates of peak snowmelt flow ranges are shown on Page 32. All are for below normal peaks. The lower range is representative of peaks that would occur from snowmelt with little rain while higher ranges can be expected with moderate amounts of rain about the same time as snowmelt is peaking. It appears that peak snowmelt flows will be earlier than normal this year. Based on current snow and weather conditions, most streams are expected to reach their snowmelt peaks the third or fourth weeks in May. Streams with lower elevation headwaters will peak sooner. Higher elevation basins such as the Gallatin and Yellowstone Rivers and most of their tributaries are expected to peak in early June.

### Kootenai Basin

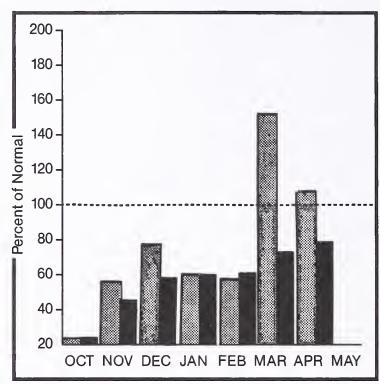
#### Mountain snowpack\* (inches)



\*Kootenai in Montana



#### Precipitation\* (percent of normal)



\*Based on selected stations



### **Water Supply** Outlook

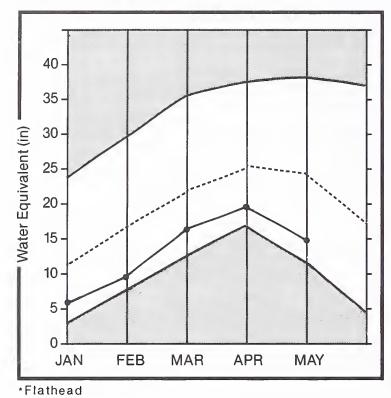
Mountain precipitation was near average in April. There was significant snowmelt this past month and the snowpack is now about 65 percent of average. Conditions in British Columbia are better than in the United States' part of the drainage. April runoff was above average. Streamflow is forecast to be below average in all drainages.

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			91.0	48	146.0			19		
	MAY-JUL	391,0	225.0	58	320.0	82	131.0	34		
	MAY-SEP	414.0	235.0	57	335,0	81	136.0	33		
				69	5810.0	88	3310, <b>0</b>	50		
	MAY-SEP	7685.0	5370+0	70	6830,0	89	3910.0	51		
 FESERVOIR S	TORAGE		(1000AF)	!		WATERSH	ED SNOWPAC	CK ANALYSIS		
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	CAPACITYI	THIS	LAST	İ	WATERSHED		COUR	SES		
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	5748.0	1648.0	<b>2</b> 712.0 1	.932.0	EAST KOOTE	NAI in B.C	. 26	100		73
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				i	KOOTENAI a	BONNERS	FERRY 56	108		64
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<sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

# Flathead Basin

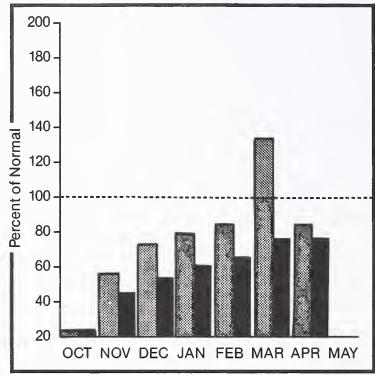




Average

Current

Precipitation\* (percent of normal)



\*Based on selected stations



# Water Supply Outlook

Maximum

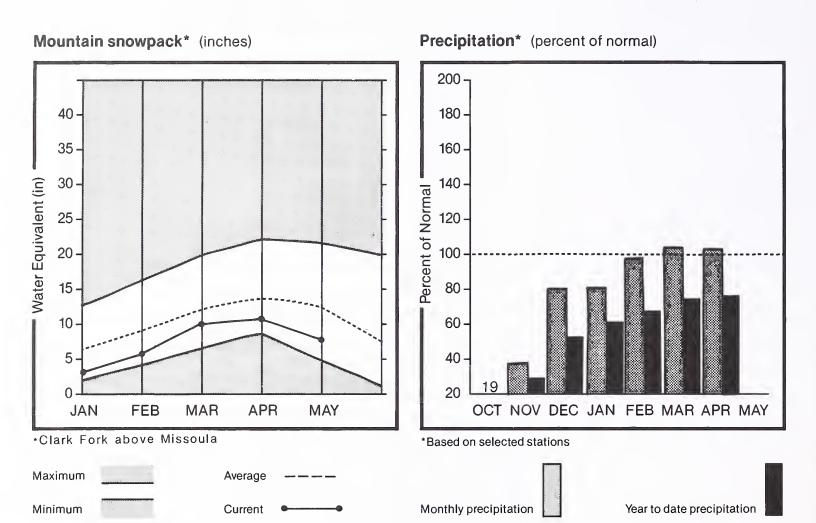
Minimum

April precipitation was below average in the mountains of the Flathead River Drainage. Snowmelt has reduced the snowpacks to about 60 percent of average. West of the Flathead River, snow at the lower elevation watersheds is nearly gone. Generally, high elevation snow is 65 to 75 percent of average. Runoff in April was a little above average. Streamflows are forecast to be about 65 to 75 percent of average for the next five month period. The Middle and North Forks of the Flathead River are expected to reach their peak snowmelt runoff between mid and late May at a little below average.

FORECAST POINT		AVG:		PROBABLE	MAX.	MAX.		REAS. MIN, (% AVG.)	
พร FLATHEAD near Columbia Falls	MAY-JUL MAY-SEP	1528.0 1708.0	990.0 1120.0	65 66	1440.0 1620.0	94 95	5 <b>5</b> 0.0 630.0	36 37	
MF FLATHEAD near West Glacier	MAY-JUL MAY-SEP	1513.0 1669.0			1470.0 1650.0	97 99	755.0 670.0	50 40	
SF FLATHEAD near Columbia Falls 1	MAY-JUL MAY-SEP				1640.0 1780.0		835.0 920.0	45 46	
FLATHEAD near Columbia Falls 1	MAY-JUL MAY-SEP	5016.0 5518.0			4410.0 4800.0	_	2410.0 2590.0	48 47	
SHAN RIVER near Big Fork	MAY-JUL MAY-SEP	509.0 595.0	325.0 400.0		420.0 505.0		235.0 295.0	46 50	
FLATHEAD RIVER near Polson 2	MAY-JUL MAY-SEP			67 65	5130.0 5440.0			<b>4</b> 8 45	
RESERVOIR	: STORAGE		(1000AF)	1 1 1		WATERSH	ED SNOWPAC	K <b>A</b> NALYSIS	
RESERVOIR	USEABLE I CAPACITYI	** USE	ABLE STORA	GE ** 1	WATERSHED			THIS	YEAR AS % OF
							AVG'		
MISSION VALLEY (8)				1			11		63
HUNGRY HORSE		1019,0		L			13		62
FLATHEAD LAKE	1791.0	864,0	944.8	929.0 I	STILLWATER	:-WHITEFISH	9	91	45
				1	SHAN		12	124	63
				1	LITTLE BIT	TERROOT	8	186	14
				1	FLATHEAD		47	- 114	59

<sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

# Clark Fork Basin above Missoula



# Water Supply Outlook

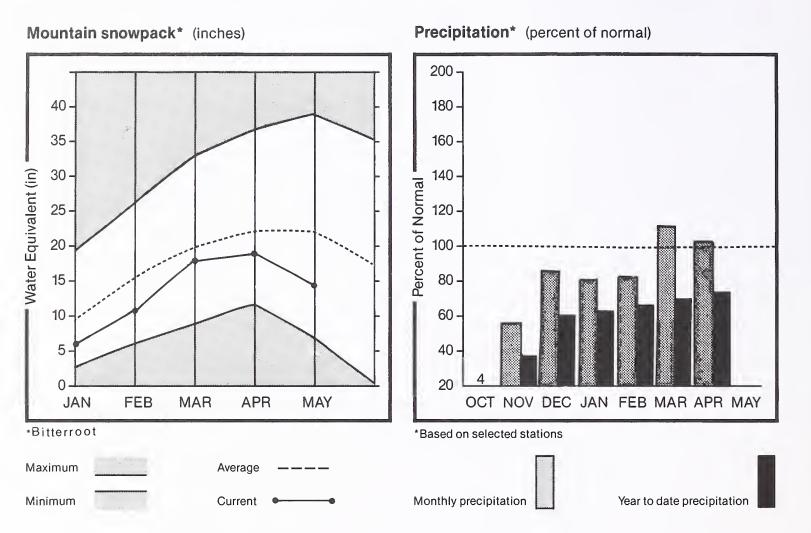
April precipitation was about average across the mountains. Snowmelt has reduced the snowpack to about 60 percent of average in the headwaters area. Runoff was a little below average for April. Forecasts of streamflow for the next five months are generally in the 55 to 65 percent of average range. Irrigation water supplies are expected to be adequate in most areas until mid-June and then could become quite short for the rest of the irrigation season. Peak snowmelt runoff is expected to occur on most streams the third or fourth week of May and generate below average flows.

FORECAST POINT		AVG,			REAS. MAX. (1000AF)	REAS: MAX; (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN, (% AVG.)	
- <b></b>									
MOULTON RESERVOIR Inflow (MG)2	MUL-YAM	197.0	120.0	61	169.0	86	71.0	36	
	JUL-YAM	222.0	136.0	61	169.0 192.0	86	81,0	36	
WARM SPRINGS at Meyers Dam 2	MAY-JUL	35.0	23.0	66	32.0	91	14.0	40	
		44.0					19:0	43	
FLINT CREEK near Southern Cross 2	MAY-JUL	13.4	8.0	60	13.0	97	3.0	22	
EEN GLEEN NEST SOSMETH GLOSS E			9,4	57				24	
FLINT CREEK below Boulder Creek 2	MAY-JUL	54.0	33.0	61	52.0	94	14.0	26	
EIN GREEK BEIOW BOSIGET GIECK E	MAY-SEP	54.0 70.0	44.0	63		99	14.0 20.0	29	
OUED UTILIOU OF SEC Totlou ?	MAV_ IIII	17 5	7 7	58	12.0	96	2 ^	24	
LOWER WILLOW CR RES Inflow 2	MAY-JUL MAY-SEP		7.2 7.9					22	
1, FK. ROCK CRK near Philipsburg			46.0 52.0		61.0 69.0		31.0 35.0	48 48	
								10	
NEVADA CREEK near Finn	MAY-JUL MAY-SEP	17.0 18.0	9,4			88	3.0	18 22	
	HH: TOEF	10+0	10,3	J/	17,0	74	7.0	22	
BLACKFOOT RIVER near Bonner		760.0	465.0		610.0		320.0	42	
	MAY-SEP	854.0	535.0	63	690.0	81	380.0	44	
CLARK FORK RIVER above Milltown 2	MAY-JUL	597+0		62				27	
	MAY-SEP	706:0	415.0	63	690.0	98	200.0	28	
CLARK FORK RIVER above Missoula	JUL-YAM	1357.0	835.0	62	1330.0	98	340.0	25	
	MAY-SEP	1560,0	975.0	62 63	1540.0	98 99	405.0	26	
				<u></u>		~			
RESERVOIR	STORAGE			!				K ANALYSIS	
	USEABLE I	** USEA	ABLE STORAG	E ** I			, ОИ		EAR AS % OF
RESERVOIR	4	YEAR	YEAR	AUG. I	WATERSHED		AVG'	D LAST Y	R. AVERAGE
GEORGETOWN LAKE					CLARK FORK	ab BLACKFO		253	
OMER WILLOW CREEK		NO REPOR	(T	1	BLACKFOOT		22	196	57
		416		1					

<sup>1</sup> - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

## Clark Fork Basin below Missoula



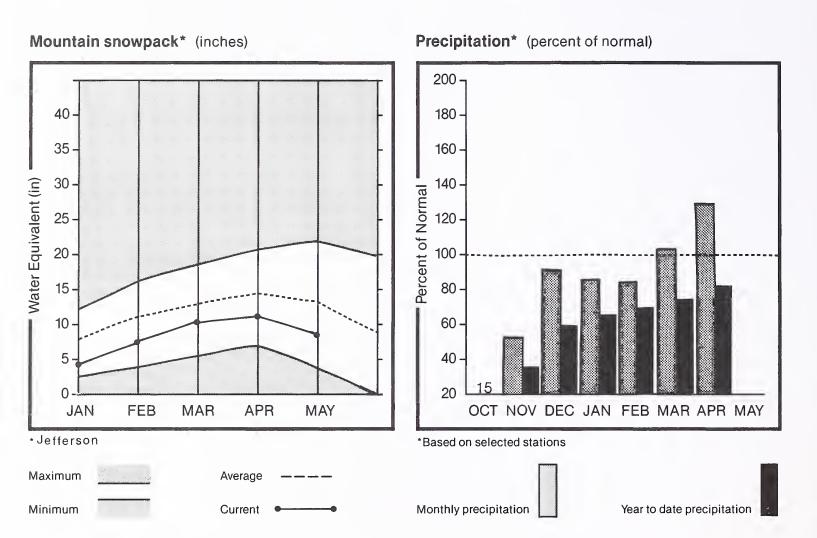
# Water Supply Outlook

During April, the mountain precipitation was about average across the basin. Snowpacks melted last month and now have water contents about 65 percent of average in the Bitterroot and 58 percent of average in drainages below Missoula. Streamflows were about average this past month. Runoff for the May through September period is predicted to be around 65 to 75 percent of average. Early season irrigation water should be adequate for most users but shortages are expected to start developing by late June. The Bitterroot River is expected to have its peak snowmelt runoff near the end of May and generate flows a little below average.

EODECAGE POTAT	FORECAST	25 YR		MOST	REAS.	REAS. MAX.			
FORECAST POINT	PERIOD	AVG, (1000AF)			MAX. (1000AF)		MIN, (1000AF)	MIN, (% AVG.)	
LARK FORK RIVER above Missoula	MAY-JUL	1357.0	835.0	62	1330.0		340.0	25	
	MAY-SEP	1560.0	975.0	63	1540.0	99	405,0	26	
, F. BITTERROOT RIVER or Conner 2	MAY-JUL MAY-SEP		104.0 120.0		138.0 159.0		70.0 81.0		
ITTERROOT RIVER near Darby	MAY-JUL MAY-SEP	470.0 519.0	325.0 355.0	69 68	445.0 475.0		210.0 235.0		
KALKAHO CREEK near Hamilton	MAY-JUL MAY-SEP	48.0 57.0	34.0 41.0	71 72	41.0 48.0		27.0 34.0	56 60	
URNT FORK CR or Stevensville 2	MAY-JUL MAY-SEP	30.0 35.0	20.0		29.0 32.0		11.0 14.0	37 <b>40</b>	
ITTERROOT RIVER at Missoula 2	MAY-JUL MAY-SEP	1239.0 1354.0	865.0 935.0		1060.0		670.0 720.0	54 53	
LARK FORK RIVER below Missoula	MAY-JUL MAY-SEP	2586.0 2914.0	1700.0 1910.0	66	2160.0		1240.0 1380.0		
LARK FORK RIVER at St. Regis	MAY-JUL MAY-SEP	3379.0 3809.0	2190.0 2490.0	65	2870.0 3250.0	85 85	1510.0 1730.0	45 45	
LARK FORK RIVER near Plains 2	MAY-JUL MAY-SEP	9541.0 10621.0	6060.0 6790.0	64 64	7590.0 8490.0		4530.0 5090.0	<b>4</b> 7 48	
HOMPSON RIVER near Thompson Falls	MAY-JUL MAY-SEP	180.0 209.0	80.0 96.0		123.0 140.0		37.0 52.0	21 25	
ROSPECT CREEK at Thompson Falls	MAY-JUL MAY-SEP	101.0 110.0	60.0		79.0 86.0		41.0 46.0	41 42	
LARK FORK at Whitehorse Rapids 2	MAY-JUL MAY-SEP	10538،0 11764,0	6620.0 7450.0		8100.0 8980.0		5140.0 5920.0		
RESERVOIR	STORAGE	(	1000AF)	1		HATERSH	IED SNOWPA	CK ANALYSIS	
RESERVOIR	USEABLE I CAPACITYI I	** USEA THIS YEAR	BLE STORAC LAST YEAR	SE **   	WATERSHED		COUI AVG	RSES	YEAR AS % O
AINTED ROCKS LAKE									62
OXON RAPIDS	335.0	275,6	329.1	186.3 1	BITTERROOT		24	220	65
ОМО	34.9	18.2	22.3	19,4 1	LWR CLARK	FK blw MIS	SOULA 24	129	58
				1	BITTERROOT	& LWR C.F	46	156	62
				1	CLARK FORK	TOTAL	98	177	61
				1	FLATHEAD		46	415	59
					FLHIREHU		40	115	J7

<sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage: The average is computed for the 1961-85 base period.

### Jefferson Basin



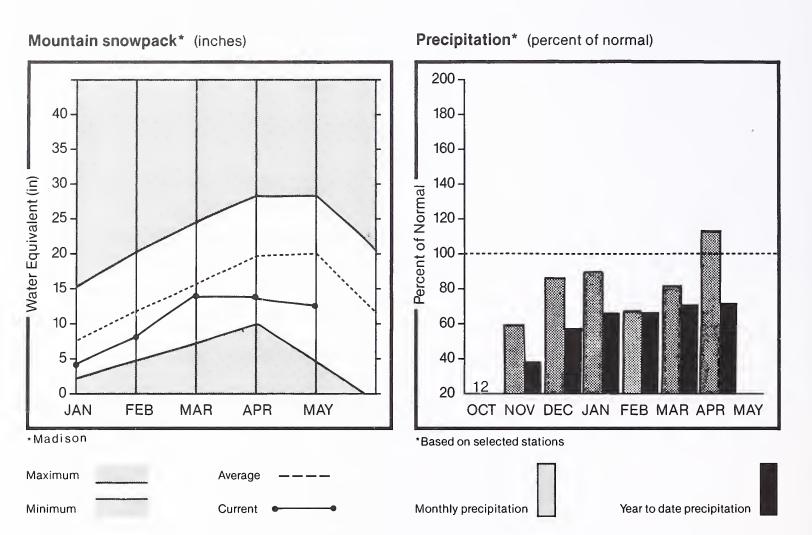
# Water Supply Outlook

During April, precipitation across the mountains was above average. Snowpacks continue to contain well below average amounts of water due to below normal early season accumulation and melt in the last half of April. Runoff in April was about average as a result of precipitation and melt. Total runoff over the next five months is forecast to be quite low with the poorest conditions in the Beaverhead River Drainage. Shortages of irrigation water supply are expected to develop by mid to late June. The snowmelt peak is expected to be near the end of May on the Big Hole and Ruby Rivers and produce a little below average flow.

25 YR: MOST MOST REAS: REAS AVG: PROBABLE PROBABLE MAX: MAX: (1000AF) (1000AF) (% AVG:) (1000AF) (% AVG:)	AS. REAS. N. MIN. 000AF) (% AVG.)
80.0 45.0 56 78.0	12,0 15
89.0 50.0 56 87.0	13.0 15
= - · · · · · · · · · · · · · · · · · ·	5.0 5 4.0 3
	12.0 8 18.0 10
75.0 49.0 65 66.0	33.0 44
92.0 61.0 66 83.0	39,0 42
612.0 385.0 63 570.0 673.0 430.0 64 630.0	
	4.0 25 5.0 27
(1000AF)   WA	
** USEABLE STORAGE **	NO. THIS YEAR AS % OF
THIS LAST I WATERSHED YEAR AVG. I	AVG'D LAST YR. AVERAGE
38.5 58.8 56.5 BEAVERHEAD	30 212 57
179.0 168.5 163.2 1 RUBY	13 174 62
39.8 40.4 35.6   BIGHOLE	29 222 67
I I BOULDER	14 245 59
]	68 214 61
39.8 40.4 35.6   BIGHOLE 	29

<sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

## Madison Basin



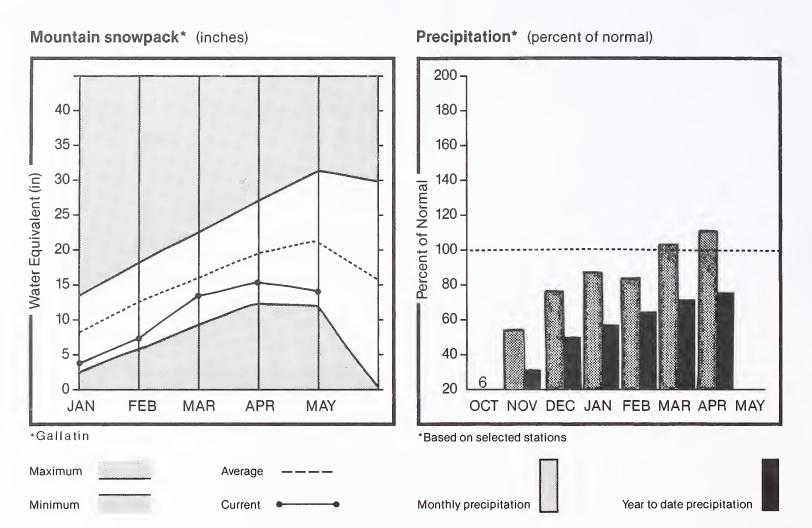
# Water Supply Outlook

During April, both snowmelt and mountain precipitation were above average. Current snowpack levels are about 65 percent of average with a little better conditions in the drainage above Hebgen Lake. May through September streamflows are forecast to total about 75 percent of average.

		STREA	AMFLOW FORE	CASTS					
FORECAST POINT	FORECAST PERIOD	AVG ,	MOST PROBABLE (1000AF)			REAS. MAX. (% AVG.)	MIN.		
MADISON RIVER near Grayling 2	MAY-JUL MAY-SEP	333.0 443.0	250.0 330.0	75 74	310.0 395.0	<b>9</b> 3 <b>8</b> 9	190.0 265.0	57 60	
MADISON RIVER near McAllister 2	MAY-JUL MAY-SEP	577.0 753.0	435.0 565.0	75 75	590.0 730.0	102 97	280.0 400.0	49 53	
	R STORAGE			     		WATERSH	ED SNOWPAC	K ANALYSIS	
RESERVOIR	USEABLE I CAPACITYI	** USEA	ABLE STORAG	E xx i	WATERSHED			SES	YEAR AS % OF
ENNIS LAKE	41.0	32.8	27 . 4	35,7 I	MADISON abo	ove HEBGEN	! 13	508	68
HEBGEN LAKE	377,5	301.5	316.3	236.2	LOWER MADIS	Ю	21	213	62
				1	MADISON		34	279	64

<sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

### Gallatin Basin



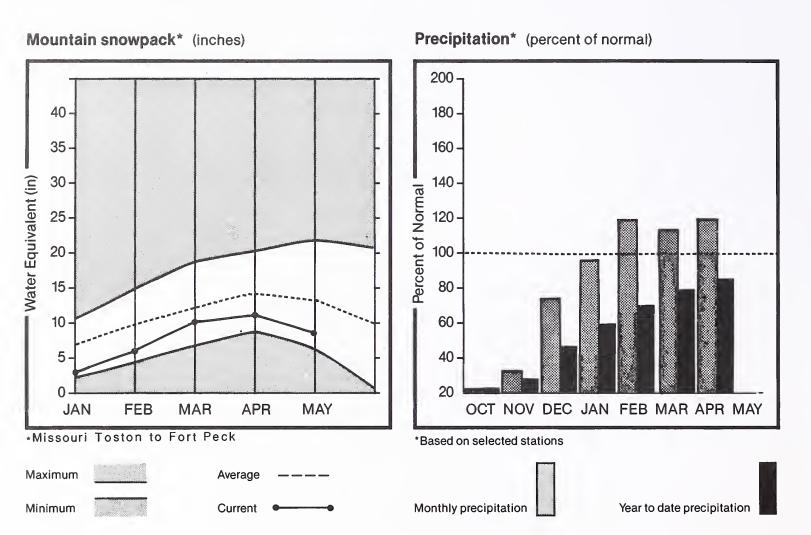
# Water Supply Outlook

Snowpacks are a little better near Bozeman than in the headwaters of the Gallatin River Drainage. Overall, the current snowpack contains about 70 percent of average water content. April runoff and mountain precipitation were both a little above average. For the next five months, streamflows are forecast to be below average from all drainages. The best runoff is expected from streams near Bozeman. There should be adequate water for irrigation through late June but it is anticipated that shortages will become widespread for the remainder of the irrigation season. The Gallatin River is expected to reach snowmelt peak in early June with a little below average flow.

FORECAST FOINT	FORECAST		MOST PROBABLE	MOST PROBABLE			REAS.	REAS. MIN.	
	PERIOD	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(% AVG.)	(1000AF)	(% AVG.)	
CALLATTAL CINED FOR C-LOUR	MAY-JUL	120 0	295.0	69	360.0	84	230.0	53	
GALLATIN RIVER near Gateway	MAY-SEP	510.0	350,0	69	440.0	86	260.0	51	
E & W FK. HYALITE CRK or Bozeman 2	MAY-JUL	23.0	19.2	83	23.0	100	16.0	70	
	MAY-SEP	27.0	23.0	85	28.0	104	18,0	67	
HYALİTE CREEK near Bozeman 2	MAY-JUL	35.0	29.0	83	37 . 0	106	21.0	60	
	MAY-SEP	41.0	34.0	83	43.0	105	25,0	61	
GALLATIN RIVER at Logan	MAY-JUL	458.0 546.0		57 57	390.0 450.0	85 82	134.0 168.0	29 31	
RESERVOIR	STORAGE			i			IED SNOWFAC		
	USEABLE I	** USEA	ABLE STORAG	E ** !			₩0+		YEAR AS % OF
RESERVOIR	l	YEAR	YEAR	AVG. 1			COUR!	D LAST	YR. AVERAGI
MIDDLE CREEK			7.0	a a a			15	203	
					EAST GALLA	MITIN	12	330	71
				2.00					

<sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

### Missouri Basin



# Water Supply Outlook

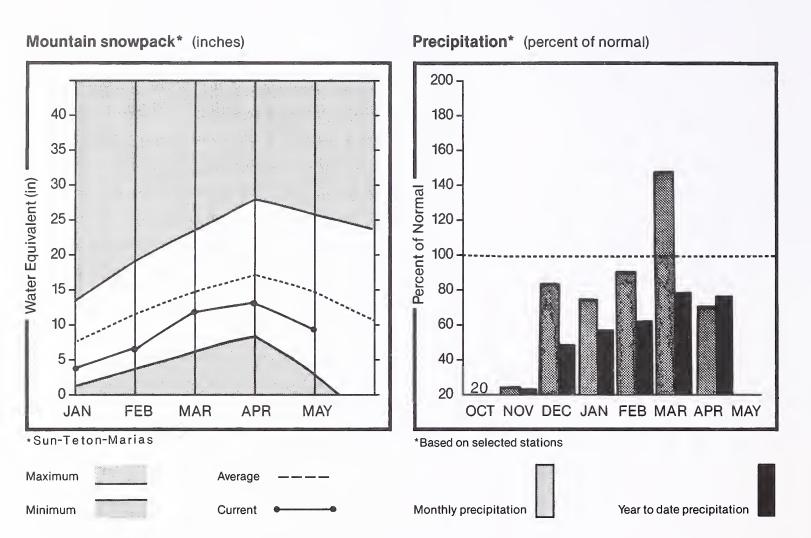
Mountain precipitation for April was above average over the basin. Snowmelt was also above average. Currently, the snowpack contains below average water content. Runoff during April was near to a little above average. For the remainder of the season, streamflows are forecast to total well below average. Early season runoff is expected to be adequate but shortages of irrigation water supplies are anticipated to develop by mid to late June. The Upper Missouri River is expected to reach peak snowmelt runoff in late May with a little below average flow.

FORECAST POINT			PROBABLE	PROBABLE		MAX.	MIN,	REAS: MIN:	
		(1000AF)	(1000AF)	(% AVG+)	(1000AF)	(% AVG.)	(1000AF)	(% AVG.)	
MISSOURI RIVER at Toston 2	MAY-JUL	1890.0				89			
	MAY-SEP	2230,0	1375.0	62	2030.0	91	715.0	32	
SHEEP CREEK or White Sulphur Spgs.	MAY-JUL	17,1	11:3	66	17.0	99	5.0	29	
	MAY-SEP	20.0	13:4	67	20.0	100	7,0	35	
ELT CREEK near Monarch	MAY-JUL	114.0	63.0	55	102.0	89	24.0	21	
SELL CREEK Hear Monarch	MAY-SEP	126,0	70.0	56	110.0	87	30,0	24	
	MH! TOEF	120,0	70,0	20	110+0	0/	30,0	24	
MISSOURI RIVER at Fort Benton 2	MAY-JUL	2930:0	1520+0	52	2520.0	86	1080.0	37	
	MAY-SEP	3450.0	1860.0	54	3040,0	88	1350.0	39	
MISSOURI RIVER at Virgelle 2	MAY-JUL	3350:0	1810.0	54	3150.0	94	1470.0	44	
abbooks haven by virgeite E	MAY-SEP	3900.0	2155.0	55	3700.0	95	1760.0	45	
CTOCOURT STUES	WAY IIII	2/50 0	1970 (0	54	2420.0	94	4 E 7 0 0	40	
MISSOURI RIVER near Landosky 2	MAY-JUL MAY-SEP	3650.0 4240.0	2370.0	54 56	3430.0 4070.0	94 96	1570.0 1910.0	43 45	
	MHI-SEF	424010	237010	20	40/050	70	171010	47	
!.F. MUSSELSHELL near Delpine	MAY-JUL	4.0	2.3	58	4.0	100	1:0	25	
	MAY-SEP	4,9	219	59	5,0	102	1,0	20	
F: MUSSELSHELL above Martinsdale	MAY-JUL	51.0	29:0	57	49.0	96	9.0	18	
Modelednese state har assissance	MAY-SEP	55.0	30,0	55	53,0	96	7:0	13	
TORONET STUSS I I S I S I S		25/4	4050.0	pro jes.	2400 0	0.4	4.4.0.0		
MISSOURI RIVER below Fort Peck 2	MAY-JUL MAY-SEP	3560.0 4100.0	1850.0 2190.0	52 53	3420.0 3980.0	96 97	1460+0 1720+0	41 42	
	MAI TOEF	4100,0	2170;0	53	3780+0	7/	1/20:0	42	
AKE SAKAKAWEA Inflow 2	MAY-JUL	9210.0	5800.0	63	9030.0	98	4140.0	45	
	MAY-SEP	10380.0	6580:0	63	10200.0	98	4670,0	45	

	RESERVOIR STORAGE		(1000AF)		WATERSHED SH	WATERSHED SNOWPACK ANALYSI					
RESERVOIR	USEABLE I CAPACITYI	** USEABLE STORAGE ** THIS LAST		RAGE **	WATERSHED	NO. COURSES AVG'D	THIS YEA	R AS % OF			
CANYON FERRY LAKE				1505.0		109	251	63			
HELENA VALLEY	9.2	8,5	7.8	7:5	WEST SIDE MISSOURI	11	254	69			
LAKE HELENA	10.4	10:9	10,9	10,0	SMITH-BELT	11	314	68			
HAUSER & HELENA	61.9	63.1	63,1	90.0	MISSOURI MAINSTEM	22	285	69			
HOLTER LAKE	81.9	80.4	80,5	72,6	SUN-TETON-MARIAS	18	146	62			
SMITH RIVER	10.6	5.0	9.8	9,4	JUDITH-MUSSELSHELL	17	382	71			
NEWLAN CREEK	12.4	9.4	10:5	9,7	MISSOURI above FORT PECK	151	239	64			
BAIR	7.0	3,1	750	6.0	MILK HEADWATERS	4	162	47			
MARTINSDALE	23,1	7.0	15.1	12.3	BEAR PAH	7	57	6			
DEADMAN'S BASIN	72,2	47.5	63,3	56:6 I	MILK RIVER	11	154	40			
FORT PECK LAKE*	18,9	14.6	16:1	15:3	MISSOURI in MONTANA	160	240	63			
*Million Acre Feet					MISSOURI blw YELLOWSTONE	262	199	65			

<sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

# Sun, Teton and Marias Basins



# Water Supply Outlook

Below average precipitation was measured in the mountains for April. Snowpacks were melting and now contain about 65 percent of average water content. During April, runoff was near to a little above average. The May through September runoff is forecast to be in the 65 to 75 percent of average range. Adequate irrigation water supplies should be available in the early part of the season. By mid to late June, shortages of irrigation supplies could develop

FORECAST POINT	PERIOD	AVG; (1000AF)	(1000AF)	PROBABLE (% AVG.)	MAX. (1000AF)	MAX. (% AVG.)	(1000AF)		
SUN RIVER st Gibson Dam 2	MAY-JUL		300.0						
SOR RIVER SO GIDSON DOW 2	MAY-SEP			66	460.0	90	185.0 210.0	41	
TWO MEDICINE CREEK near Browning 2	MAY-JUL	197.0	141.0	72	215.0	109	66.0	34	
•		210.0		71	225,0	107	74,0	35	
BADGER CREEK near Browning		97.0				108	31.0	32	
	MAY-SEP	114.0	82,0	72	122,0	. 107	42,0	3.7	
SWIFT RESERVOIR Inflow or Dupuyer	MAY-JUL	64.0 76.0	50.0		74.0			41	
	MAY-SEP	76+0	59.0	78	86.0	113	32.0	42	
CUT BANK CREEK at Cut Bank		79.0			86+0			33	
	MAY-SEP	88,0	61,0	69	93.0	106	29,0	33	
MARIAS RIVER near Shelby	MAY-JUL MAY-SEP		245.0 250.0		400.0	97 93		21 21	
RESERVOIR	STORAGE	(	1000AF)	   	>> 	HATERSH	ED SNOWPACK	 K AMALYSIS	
RESERVOIR			BLE STORAG		WATERSHED		NO. COURS		YEAR AS % OF
	1	YEAR	YEAR	AVG. I	WATERSHED		AVG'C	) LAST	YR. AVERAGE
GIBSON					SUN-TETON			215	
PISHKUN	32:0	23,8	27.6	26,6	MARIAS		6	116	66
WILLOW CREEK	32,2	26:9	29,3	23.7	sun-тетом-	MARIAS	18	146	62
LOWER THO MEDICINE LAKE	11:9	12.3	12 = 2	10,6					
FOUR HORNS LAKE	19.2	13:9	12,8	12,8					
SMIFT	30.0	23:3	24.9	16,1					
LAKE FRANCES	112,0	98+0	94,1	74.6					

<sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

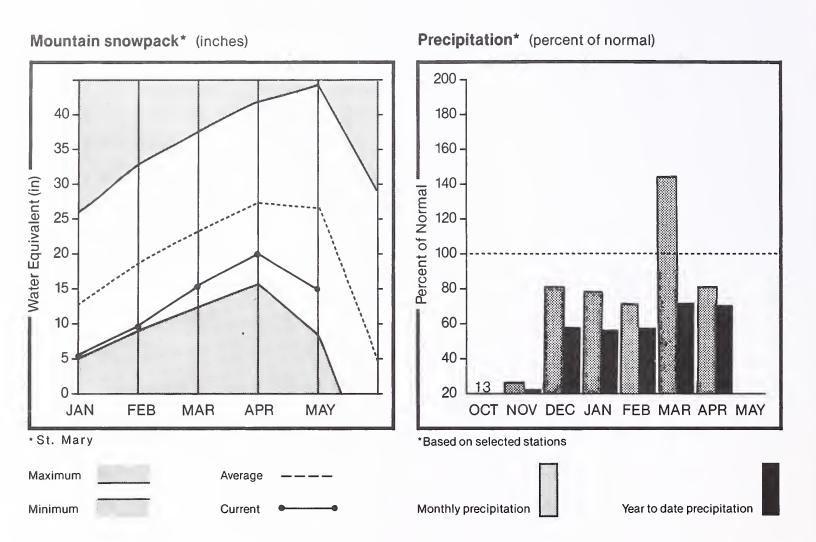
683.9 748.4

582,5 1

1347.0

LAKE ELWELL (TIBER)

# St. Mary and Milk Basins



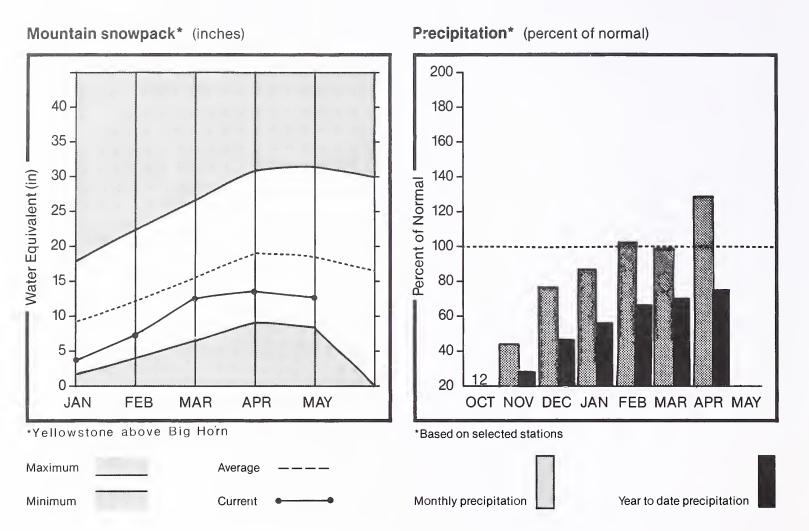
# Water Supply Outlook

Snowpack is quite low for this time year in all areas as a result of melt and below average mountain precipitation in April. Runoff was near to above average this past month. It is forecast to be below average for the next five month period. Unless rainfall is average or above, irrigators without stored water are facing another short supply year.

FORECAST FOINT		AVG.		PROBABLE	REAS. MAX. (1000AF)	MAX.	REAS. MIN. (1000AF)	MIN.	
SWIFTCURRENT CREEK at Sherburne 2		101.0	76.0	75	98.0	97	54.0	<b></b> 53	 
JAI TOURNERT GREEK SV SHELDSTILE Z					118.0		60.0		
ST. MARY'S RIVER near Babb 2	MAY-JUL MAY-SEP	3 <b>8</b> 3.0 453.0	290+0 345+0		360.0 925.0	94 94		57 58	
MILK RIVER at Eastern Crossing					45.0		22.0	43	
MILK RIVER at Eastern Crossing 2	MAY-SEP	204.0	197.0	97	219.0	107	184.0	90	
RESERVOIR	USEABLE I CAPACITYI I	** USEA THIS YEAR	ABLE STORAG LAST YEAR	SE ** I I AVG. I	WATERSHED		NO. COUR AVG'	THIS SES D LAST	
LAKE SHERBURNE	64.3	6.6	29.1	19.6 1	MILK HEAD	IATERS	4	162	47
FRESNO	127.0	94.7	105.3	96,5	BEAR PAW		7	57	6
BEAVER CREEK	3.5	3.0	3.3	2,6 1	MILK RIVER		11	154	40
NELSON	8.66	41.0	54.7	42.0	ST. MARY		11	108	57
				į	ST: MARY a	and MILK	18	108	55
					BOW RIVER	in ALBERTA	14	93	89
						ER in ALBE	RTA 3	91	79

<sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

### Yellowstone Basin



# Water Supply Outlook

Mountain precipitation was above average for April over the basin. Snowmelt the last half of the month reduced snowpacks a little earlier than normal. The current amount of water stored in the snowpack is about 70 percent of average in most drainages. Runoff was near to a little below average in April. Forecasts of May through September streamflow are in the 60 to 75 percent of average range. Runoff from some streams with headwaters in Wyoming is expected to be a little better. Early season irrigation water supplies should be adequate but irrigators getting water from smaller streams could see shortages by mid to late June. Peak snowmelt runoff is expected to occur in early June for most areas with flows a little below average.

FORECAST POINT		25 YR. AVG.	PROBABLE		REAS.	MAX.		REAS. MIN.	
	PERIOD				(1000AF)		(1000AF)		
(ELLOWSTONE at Lake Outlet	MAY-SEP	784.0	520.0	66	615.0	78	425.0	54	
YELLOWSTONE at Corwin Springs	MAY-JUL MAY-SEP	1570.0 1910.0			1220.0 1480.0		720.0 865.0		
YELLOWSTONE near Livingston	MAY-JUL MAY-SEP	1810.0 2220.0	1180.0 1410.0		1470.0 1760.0		890.0 1060.0		
BOULDER RIVER at Big Timber	MAY-JUL MAY-SEP	340.0 372.0	250.0 280.0		320.0 360.0	94 97	179.0 200.0		
STILLWATER RIVER or Absarokee 2	MAY-JUL MAY-SEP	501.0 602.0	365.0 445.0		495.0 575.0		235.0 315.0		
CLARKS FORK RIVER near Belfry	MAY-JUL MAY-SEF		360.0 400.0		460.0 510.0		260.0 290.0		
COONEY RESERVOIR Inflow	MAY-JUL MAY-SEP	41.0 51.0			39.0 47.0		17.0 23.0		
YELLOWSTONE RIVER at Billings 2	MAY-JUL MAY-SEP	3480.0 4160.0	2400.0 2885.0		3030.0 3620.0		1770.0 2120.0		
BIGHORN RIVER at St. Xavier 2	MAY-JUL MAY-SEP	1580:0 1790:0	1010.0 1140.0		1360.0 1540.0		710.0 805.0		
ITTLE BIGHORN RIVER near Hardin	MAY-JUL MAY-SEP	125.0 144.0	90.0 103.0		145.0 167.0		41.0 48.0		
TONGUE RIVER at Decker	MAY-JUL MAY-SEF	210:0 235:0	152.0 166.0		275.0 305.0		67.0 73.0		
YELLOWSTONE RIVER at Miles City 2	MAY-JUL MAY-SEF	5150.0 6020.0	3500.0 4080.0		4640.0 5420.0		2420,0 2830,0		
°OWDER RIVER at Moorehead	MAY-JUL MAY-SEP	204.0 218.0	94.0 100.0		245,0 260,0		29,0 30,0		
YELLOWSTONE RIVER near Sidney 2	MAY-JUL MAY-SEP	5700,0 6640,0	3700,0 4260.0		5190.0 5980.0	_	2510.0 2860.0		
RESERVOIR	STORAGE	(	1000AF)	     				CK ANALYSIS	
	USEABLE I	** USEA	BLE STORAG	•			 МО •		 EAR AS % O
RESERVOIR	CAPACITY!	THIS YEAR	LAST YEAR	AVG. I	WATERSHED			RSES D LAST Y	R, AVERAG
YSTIC LAKE	21.0	0+7	2.6	2.0 1			GSTON 24	180	
COOHEY	27 . 4	23.9	24.4	18.6	SHIELDS		10	609	68
RIGHORN LAKE	1356.0	831.8	793,2	681.2 I	BOULDER-ST	ILLWATER	9	136	65
ONGUE RIVER	68.0	37.8	45.6	36,7 I	CLARK'S FO	RK-ROCK CR	REEK 21	162	70
ONDUE NEITH				1	YELLOWSTON	E above BI	CGHORN 50	188	68
0.00E 1.21EII									
5.55E 1.21E.1				i	LITTLE BIG	HORN	5	182	87
					MIND RIVER		_	182 125	87 66
						: (₩yoming)	31	125	
					WIND RIVER	: (Wyoming) :VER (Wyomi	) 31 ing) 30	125 153	66
					WIND RIVER	: (Wyoming) VER (Wyomi SIN (Total	31 (ing) 30 (i) 56	125 153 144	66 73
					WIND RIVER BIGHORN RI BIGHORN BA	: (Wyoming) VER (Wyomi SIN (Total ER (Wyomin	) 31 ing) 30 l) 56 ng) 15	125 153 144 193	66 73 70

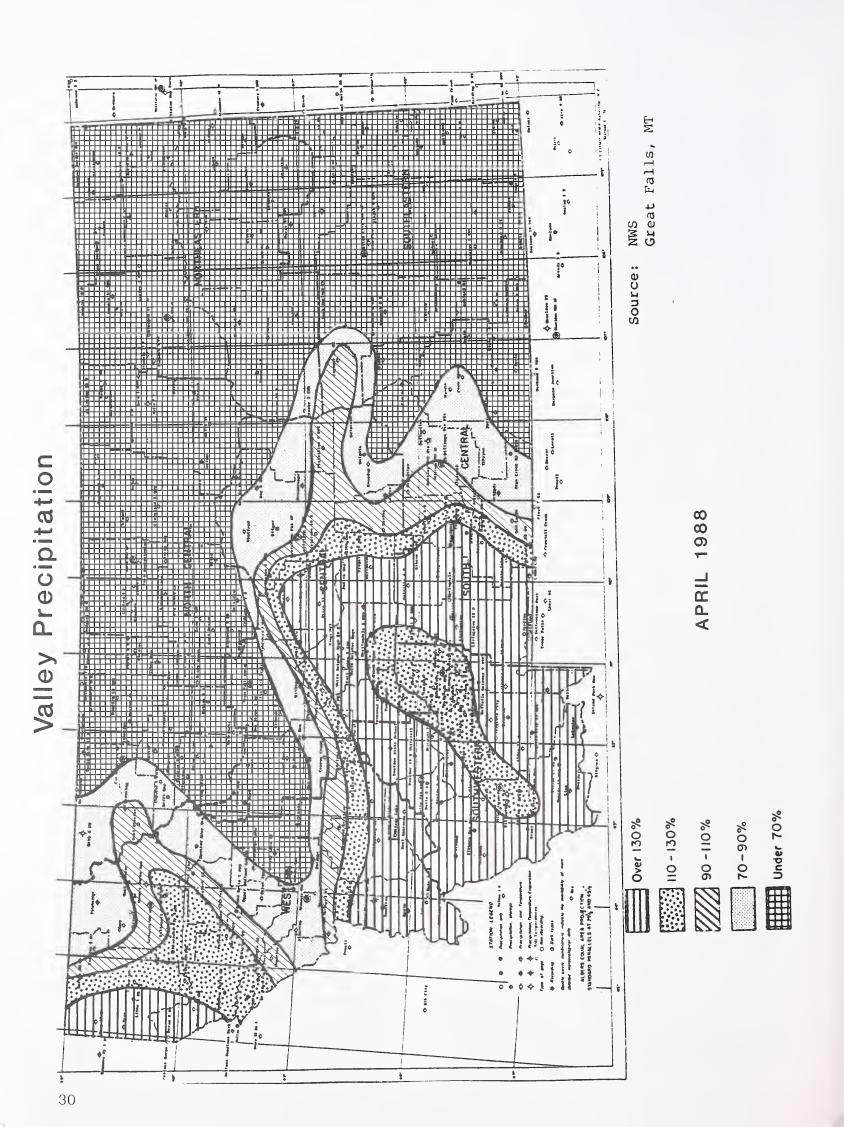
<sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

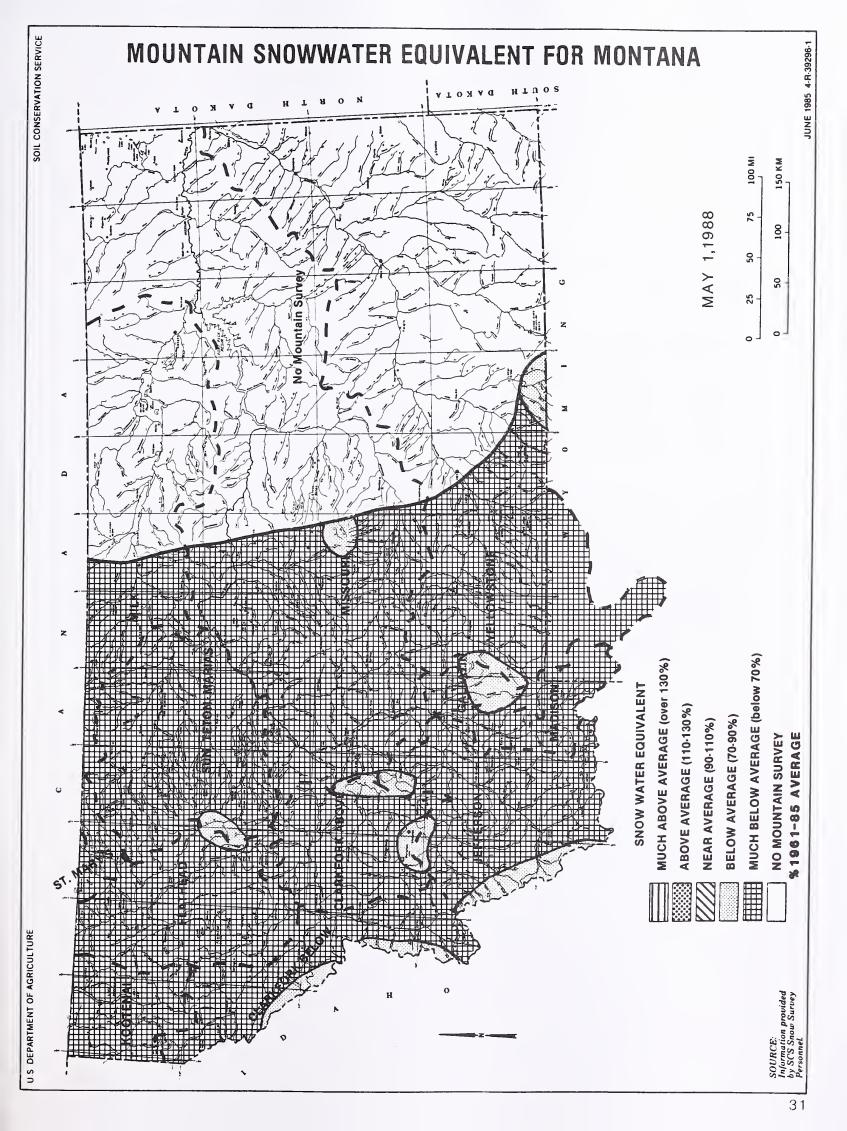
# Snow Data Measurements

MALANICE LIMIT   6800	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	-	SNOW COURSE E	ELEVATION	OATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
AGE   Color	MONTANA														10.2
MORDEL 6 478-98 0 71,8 1,1 13,7 DEFINISHED LAW 1,1 13,	ABUNDANCE LAKE	8800	4/26/88	52	16.2	11.4	23.8								6.0
AND COLORS OF THE COLORS OF TH			4/28/88	20											27.9 30.1
BASSEP PASS PILLON   Sold   Shift Pass   25.6   25.4   23.9   42.5   ESEMEN CREEK   Sold   42.48   10   4.7   2.0   5.4   4.5   3.9   42.5   ESEMEN SAIRS   Sold   42.48   10   4.7   2.0   5.4   4.5   3.9   42.5   ESEMEN SAIRS   Sold   42.48   10   4.7   2.0   5.4   4.5   3.9   42.5   ESEMEN SAIRS   Sold   42.48   5.7   3.1   2.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3.1   3.0   3															22.3
SOUTH PASS PASS 930 447/88 72 12.4 29.9 42.5 CAMPAIN PASS PASS PASS PASS PASS PASS PASS PAS				-											6.9
BASE FLOW THE PILLOW  500 - 476-708   72 - 410.5   41.0													-		8.7
SAMPLICA MONITOR STATES  SERVICE CERTIC  SERVI							63.0								27.1
BASEL FILES - 5500 - 472/88 23 11.2 9.0 22.4 01/18 PILLON 500 50/18 10 5.2 4.8 11.2 9.0 22.4 01/18 PILLON 500 50/18 10 5.2 4.8 11.2 9.0 22.4 11.2 9.0 22.4 11.2 9.0 22.4 11.2 9.0 22.4 11.2 9.0 22.4 11.2 9.0 22.4 11.2 9.0 22.4 11.2 9.0 22.4 12.2 9.0 22.4 1															11.0
BOME PIEMAY 4600 4728-89 37 16.3 24.4 21.6 DIVEN PIEMA 9600 907.08 9.7 4.3 E.S. P.															11.4
SEARCH FUNCTS FILLIN				_											12.8
BANKE PLANS PILLON  SASIA DETEC PILLON  7180  7070  7080  70															10.7
BASIN DEEPE PILLON 7180 507/08 - 8 . 0 . 0 . 0 . 10.3 ELSI-NOR MINES 540 MC2688 17 . 20 . 0 . 0 . 0 . 10.8 ELSI-NOR MINES 540 MC2688 17 . 20 . 0 . 0 . 0 . 0 . 6.8 ELSI-NOR MINES 540 MC2688 17 . 20 . 0 . 0 . 0 . 0 . 6.8 ELSI-NOR MINES 540 MC2688 17 . 20 . 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0 .													21.5	13.5	34.5
BASIN CREEK SISO 42/98 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0															1.2
## ACAD PILON ##					8.0										8.6 20.0
BEAGE SIGN   S150   A72798   S150   L.2   S.0   CHUNT VICELY PILLUM   S150   S.07,088   S15   S.2   Z.2   S.0   S.															9.7
BEAR PARS I PÉRS   150   472788   49   18.8   8.3   23.4   FINE CEEX PLUM   500   472788   6.5   18.2   14.0   23.3   33.8    BEAR PARS I PÉRS   500   472788   6.5   14.8   6.4   21.8   FINER CEEX PILLM   5100   570.78															8.5
## SHE MATER AS 1.0 MATER AS 1.															24.8
SATE PILLS 7700 47288 0 1.3 9.4.2 21.3 FISHER DEER 9100 500288 0 22.3 19.7 42.8 16 SEY MEADON 6550 47288 14 1.2 3.0 0.3 3.8 16 SEY MEADON 6550 47288 14 1.2 3.0 0.3 3.8 16 SEY MEADON 6550 47288 14 1.2 3.0 0.3 3.8 16 SEY MEADON 6550 47288 15 1.3 1.0 0.3 3.8 16 SEY MEADON 6550 47288 15 1.3 1.0 0.3 3.8 1.0 0.3 3.9 1.0 0.3 3.8 1.0 0.3 3.8 1.0 0.3 3.9 1.0 0.3 3.9 1.0 0.3 3.0 1.0 0.												-			39.5
BIG SKY PACON 550 4/25/88 39 12.7 2 2.6 17.7 FINTEN-TH PILLON 550 4/25/88 39 12.7 3 0.9 3.9 BIG SKY PACON 550 4/25/88 39 12.7 3.9 3.9 BIG SKY PACON 550 4/25/88 35 12.5 III.4 25.3 FILEEER PIDES 220 4/25/88 46 14.2 8.8 31.9 BIG SKY PACON 550 4/25/88 55 21.5 III.4 25.3 FILEEER PIDES 220 4/25/88 6 1.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0															42.8
81G SNY PEADON 6550 4/25/88 54 1.3 1.0 3.9 PALTINE RIP IN PRINTED.  81G SNAP 7150 4/25/88 52 1.1.5 11.4 25.3 PALTINE RIP IN PRINTED.  81G SNAP 7150 4/25/88 52 1.5 11.4 25.3 PALTINE RIP IN PRINTED.  81G SNAP 7150 4/25/88 84 36.5 9.8 44.2 PRINTED.  81G SNAP 7150 4/25/88 84 36.5 9.8 44.2 PRINTED.  81G SNAP 7150 4/25/88 84 11.4 25.3 PRINTED.  81G SNAP 7150 4/25/88 84 11.4 25.3 PRINTED.  81G SNAP 7150 4/25/88 84 11.4 25.3 PRINTED.  81G SNAP 7150 4/25/88 84 11.4 25.3 PRINTED.  81G SNAP 7150 4/25/88 84 11.4 25.3 PRINTED.  81G SNAP 7150 4/25/88 85 12.5 11.4 25.3 PRINTED.  81G SNAP 7150 4/25/88 85 12.5 11.4 25.3 PRINTED.  81G SNAP 7150 4/25/88 85 12.5 11.4 25.3 PRINTED.  81G SNAP 7150 4/25/88 85 12.5 11.4 25.3 PRINTED.  81G SNAP 7150 4/25/88 85 12.0 0.0 0.0 0.0 12.6 PRINTED.  81G SNAP 7150 4/25/88 85 12.0 0.0 12.6 PRINTED.  81G SNAP 7150 4/25/88 85 12.0 0.0 12.6 PRINTED.  81G SNAP 7150 4/25/88 85 12.0 0.0 12.6 PRINTED.  81G SNAP 7150 4/25/88 85 12.0 0.0 12.6 PRINTED.  81G SNAP 7150 4/25/88 85 12.0 0.0 12.6 PRINTED.  81G SNAP 7150 4/25/88 13 11.4 10.0 0.0 12.0 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 3.9 8 3.3 PRINTED.  81G SNAP 7150 4/25/88 13 11.4 1.3 PRINTED.  81G SNAP 7150 4/25/88 13 PRINTED.  81G SNAP 7150 4/25/88 13 PRINTED.  81G SNAP 7150 4/25/88 13 PRINTED.  81G SNAP 7150 4															3.8
SILVENIES   11-20															49.2
SULCE BERN PILLON 7950 50/07893 33.6 9.8 44.2 FOUR HILE 6000 4/2788 6 1.9 0 0 1.0 1.0 I.S. SIKK PRUNTAIN 7950 50/07893 33.6 9.8 38.1 FOURTH OF JLV 39.6 7.2 P. S.															19.3
BLACK PINE PILLOW 1750 670788 11.5 7.6 18.1 PRODUCE PAGES 80 472788 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				-						6900	4/29/88	6			8.1
BLACK PINE   7100   5901/88   9.6   1   14.8   FREIGHT CREEK   5000   4/27/88   25   9.5   6.8   14.8   BLACK PINE   7100   4/26/88   24   7.8   0   13.9   FRIDAY HILL   427/88   5   0.0   0   12.8   BLOOPY DICK PILLOH   755   7501/88   7.4   1   10.0   FROMER HERONS   6480   4/27/88   5   1.5   0.0   6.8   BLOOPY DICK PILLOH   755   4/27/88   25   2.3   0   13.7   6ARVER CREEK   427/88   0   0   0   0   0   BLOOPY DICK   7850   4/26/88   26   2.3   0   13.7   6ARVER CREEK   4250   4/24/88   0   0   0   0   0   BLOOPY DICK   7850   4/27/88   35   15.9   14.8   24.4   6ARVER CREEK   4250   4/24/88   0   0   0   0   0   BLOOPY DICK   7850   4/27/88   35   3.3   1.8   5.3   14.8   24.4   BLOOPY DICK   7850   4/27/88   35   3.3   1.8   5.3   7.5   60AT MEMBRIAN   4750   4/24/88   0   0   0   0   0   BLOOPY DICK   7850   4/27/88   35   3.3   1.8   5.3   7.5   60AT MEMBRIAN   7000   4/24/88   0   0   0   0   0   BLOOPY DICK   7850   4/27/88   35   3.3   1.8   5.3   7.5   60AT MEMBRIAN   7000   4/24/88   0   0   0   0   0   BLOOPY DICK   7850   4/27/88   12   5.0   5.5   5.5   60AT MEMBRIAN   7000   4/24/88   1   4.3   1   0   9   BLOOPY DICK   7850   4/27/88   12   5.0   5.5   60AT MEMBRIAN   7000   4/24/88   1   4.3   1   0   9   BLOOPY DICK   7850   4/27/88   12   5.0   5.5   60AT MEMBRIAN   7000   4/28/88   1   4.3   1   0   9   BRICK CARVEN PILLOW   7550   4/27/88   3   8   1.4   2.2   60AT MEMBRIAN   7000   4/28/88   9   1.5   0   5   BRINGER BERGEK   4500   4/27/88   3   8   1.4   2.2   60AT MEMBRIAN   7000   4/28/88   9   1.5   0   5   BRINGER BERGEK   4500   4/27/88   3   8   1.4   2.2   60AT MEMBRIAN   7000   4/28/88   7   2.6   1.4   BRIDGER BIRD   7100   4/28/88   0   0   0   0   0   1.6   6AT MEMBRIAN   7000   4/28/88   7   2.6   0   1.4   BRIDGER BIRD   7100   71															1.2
BLACKTAIL  500 4727/88 5 2.1 9 FROME MILL  500 4727/88 5 2.1 9 FROME MILL  500 4727/88 5 2.1 9 FROME MIND FILLON 640 5707/88 5.4 2.2 9.  500 500 10. 7600 4728/88 26 5.2 3.0 13.7 6400 5707/88 5.4 2.2 9.  500 500 500 500 4728/88 13 3.9 14.8 24.4 64 6400 6420 4728/88 5.6 0.0 4.  500 500 500 4728/88 13 3.9 14.8 24.4 64 6400 6420 4728/88 0.0 0.0 0.4 4.  500 500 500 4728/88 13 3.9 14.8 24.4 64 6400 6420 4728/88 0.0 0.0 0.4 4.  500 500 500 4728/88 13 3.9 14.8 24.4 64 6400 6420 6428/88 4.3 10.9 9.  500 500 570/88 16.2 5.6 22.6 62.6 60.D STOME 6400 4728/88 14 4.3 1.0 9.  500 500 570/88 16.2 5.6 22.6 60.D STOME 6400 4728/88 35 11.4 7.9 19.  500 570/88 24.4 5.1 640 57.5 640 570 570 570 570 570 570 570 570 570 57					9.6	.1	14.8								29.4 14.2
BLOODY DICK   PILLON   7550   5701/88     7.4   1   10.0   10.0   FINEMER PINDS PILLON   5880   5701/88     5.4     2.8															12.0
BUILD LIKE   5900   472788   26   8.2   3.0   13.7   FAMELY ROLE   FILLUM   4250   472788     6.   0.0   4.												5		.0	6.1
BULLER MONTON PILLON 7500 4/27/88 36 15.9 14.8 24.4 GARVER CEEK 4250 4/24/88 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													-		9.0
BOULDER MONATAIN 7950 4/25/88 13 3.9 i.8 9.3 61880NS PASS 7100 4/26/88 34 15.8 5.8 23. 71.0 22.7 60A MONATAIN 7950 5/01/88 16.2 5.6 22.6 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 11.4 7.9 18. 60A MONATAIN 7000 6/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 13 1.1 0 9. 9. 60A MONATAIN 7000 4/26/88 10 0. 0 1.0 1.6 HAMO CREEK 7000 4/26/88 8 2.6 1.2 10. 9. 80B MONATAIN 7000 4/26/88 0 0. 0 1.0 2.2 HAMINISTON FOR 7000 4/26/88 8 2.6 1.2 10. 9. 60A MONATAIN 7000 4/26/88 10 0. 0 1.0 2.2 HAMINISTON FOR 7000 4/26/88 10 1.2 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0															4.7
BOLLER MIN PILLID  950 501/88 16.2 5.6 22.6 GOLD STIDE  80X CANYON BETO  80X CANYON PILLON  80X CANYON BETO  80X CANYON PILLON  80X CAN															23.9
BOX CANYON PILLON 670 5/01/88 1-2 5.0 0 7.5 SULD SIGNE 100 4/28/88 3 1.5 7.0 5.5 SULD SIGNE SIGN												-			9.5
BOXELISE RÉEK S  800 4/77/88 3 .8 1.4 2.2 GRAYE CER FILLON 4300 5/01/88 0.0 0.8 BOXELISE RÉEK S  800 4/77/88 3 .8 1.4 2.2 GRAYE CERE 4300 4/27/88 7 2.5 0.0 14.8 BANHAM LAKES 8805 5/02/88 4- 19.8 3.5 29.7 BUSISTON LOREN F. 19.8 2.9 31.3 HAND CREEK 5030 4/27/88 76 35.1 24.5 54.2 BUSISTON LOREK 3900 4/27/88 8 19.7 2.9 31.3 HAND CREEK 5030 4/27/88 8 2.6 1.2 10. 8 BUSISTON LOREK 5000 4/28/88 0 .0 1.0 1.0 1.6 HAND CREEK FILLON 5030 5/01/88 3.5 1.7 9. 8 BUSISTON LOREK 5000 4/28/88 0 .0 1.0 2.0 1.6 HAND CREEK FILLON 5030 5/01/88 3.5 1.7 9. 8 BUSISTON LOREK 5000 4/27/88 0 .0 1.0 2.2 HART LAKE FILLON 5030 5/01/88 3.5 1.7 9. 6 30. 10. 10. 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1				12											19.2 5.3
BRANHAM LAKES 8850 5/02/88 64 25.1 18.2 35.1 GRIFFIN CV DIVIDE 5130 4/28/88 1 .4 .6 .7												_		_	8.5
BRIDGER BOILL 9750 4/27/88 19.8 3.5 29.7 GINFIFIN ON DIVIDE 5130 4/27/88 76 35.1 24.5 42.  BRISTOW CREEK 7780 7750 4/27/88 58 19.7 2.9 31.3 HAND CREEK 5030 4/27/88 8 2.6 1.2 10.  BRUSH CREEK TIMBER 5000 4/28/88 0 .0 .0 .0 .0 7.0 HANKINS LAKE FILLOW 650 5/01/88 3.5 1.7 9.  BRUSH CREEK TIMBER 5000 4/28/88 0 .0 .0 .0 3.7 HANKINS LAKE FILLOW 650 5/01/88 25.1 19.6 30.  BRUSH CREEK 5000 4/27/88 0 .0 .0 .0 3.7 HANKINS LAKE FILLOW 650 5/01/88 25.1 19.6 30.  CABIN CREEK 5000 4/27/88 28 8.6 4.9 13.9 HERBEN DAW 650 5/01/88 2.7 17.  CALVERT CREEK 6430 4/28/88 14 4.6 .0 9.6 HEL ROBARINO DIVIDE 5770 4/28/88 4 1.2 .0 7.  CALVERT CREEK 6430 4/28/88 19 3.6 31.3 53.9 HERBEN DAW 650 5/01/88 22.1 41.4 32.1  CAMP MISERY 6400 4/28/88 19 5.6 2.4 9.2 HOOD MEADON 650 600 4/28/88 19 5.6 2.4 9.2  CARROI BASIN PILLOW 9000 5/01/88 22.4 14.4 32.1 HOODO BASIN FILLOW 650 5/01/88 30.0 2.0 6.1 HOODO BASIN FILLOW 650 5/01/88 22.1 41.4 52.1 HOODO BASIN 600 5/01/88 22.4 14.4 32.1 HOODO BASIN 600 4/30/88 90 4/26/88 3 1.1 1.3 1.8 5.8 1.1 HOODO BASIN 600 4/28/88 19 1.1 1.2 1.0 1.0 1.1 HOODO BASIN 600 4/28/88 19 1.1 1.2 1.0 1.0 1.1 HOODO BASIN 600 4/28/88 10 1.1 1.2 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0														_	14.1
BRIJGER BOM. 7/296 4/27/88 90 0.0 0.0 1.6 HAND CREEK 5030 4/28/88 8 2.6 1.2 10.0 RISTON CREEK TIMBER 5000 4/28/88 0 0.0 0.0 1.6 HAND CREEK PILLON 6030 5/01/88 3.5 1.7 9.9 RUSH MOUNTAIN 6600 4/28/88 0 0.0 0.0 3.7 HANKINS LAKE PILLON 6050 5/01/88 25.1 19.6 30.															7.3
BRISTOM CREEK   3900   4/24/88   0   .0   .0   .1.6   HAND CREEK PILLON   5030   5/01/88   .25.1   .19.6   30.   BRUSH CREEK TIMBER   5000   4/28/88   0   .0   .0   .0   .3.7   HAMKINS LAKE PILLON   6450   5/01/88     .25.1   .19.6   30.   CABIN CREEK   5200   4/27/88   28   8.6   4.9   31.9   HEART LAKE TRAIL   4800   4/30/88   22   9.6   2.7   17.   CALVERT CREEK   6430   5/01/88     .0   0.   2.2   HEART LAKE TRAIL   4800   4/30/88   22   9.6   2.7   17.   CALVERT CREEK   6430   5/01/88     .0   0.   2.5   HERICOLOM   6550   4/28/88   45   19.0   18.4   12.   CAMP MISERY   6400   4/24/88   79   33.6   31.3   53.9   HOLSPOOK   4530   5/02/88   0   0.   0.   0.   2.5   CAMP SENIA   7890   4/28/88   19.5   6.2   4.9.2   HOLD MEADON   4550   4/26/88   38   15.4   14.4   2.5   CARROT BASIN PILLON   9000   5/01/88     22.4   14.4   32.1   HODD MEADON   6500   5/01/88     35.0   29.0   4.9   CARROT BASIN PILLON   7800   5/01/88     7.9   2.4   10.5   HODDOO BASIN   6050   5/01/88   90   42.6   31.1   53.0   CEDER GROVE   3760   4/24/88   3   8.0   0.2   7.   10.5   HODDOO BASIN   6050   5/01/88   90   42.6   31.1   53.0   CHECKEN CREEK   4060   4/27/88   3   1.8   0.   2.7   10.5   HODDOO BASIN   6050   4/27/88   39   16.8   16.1   31.0   CHECKEN CREEK   4060   4/27/88   37   13.6   8.8   20.6   1.0   2.5   CHECKEN PILLON   8800   5/01/88     13.8   7.1   19.0   1.2   CHECKEN PILLON   8800   4/27/88   37   13.1   6.8   20.6   1.2   CHECKEN PILLON   8800   4/27/88   37   13.1   6.8   20.6   1.2   CHECKEN PILLON   8800   4/27/88   37   13.1   6.8   20.6   1.2   CHECKEN PILLON   8800   5/01/88     13.8   7.1   19.0   1.2   CHECKEN PILLON   5800   4/26/88   10   2.8   0.0   0.1   3.5   CHECKEN PILLON   5800   4/26/88   0.0   0.0   0.3   3.8   CHECKEN PILLON   5800   4/26/88   0.0   0.0   0.3   3.5   CHECKEN PILLON   5800   4/26/88   0.0   0.0   0.3   3.5   0.5   0.0												-			10.1
BULL MOUNTAIN 6500 4/22/88 0 0 0 0 2.2 HARKING LAKE 6450 4/24/88 65 27.2 21.4 32. CABIN CREEK 5200 4/27/88 28 8.6 4.9 13.9 HEBOEN DAY 6550 4/26/88 4 1.2 0 7. T. CALVERT CREEK 6430 4/28/88 14 4.6 0 9.6 HELL ROARING DIVIDE 5770 4/28/88 4 1.2 0 7. T. CALVERT CRILL MAD 6430 5/01/88 0 0 0 2.5 HELL ROARING DIVIDE 5770 4/28/88 4 1.2 0 7. T. CALVERT CRILL MAD 6430 5/01/88 0 0 0 2.5 HELL ROARING DIVIDE 5770 4/28/88 4 1.2 0 0 7. T. CALVERT CRILL MAD 6430 5/01/88 0 0 0 2.5 HELL ROARING DIVIDE 5770 4/28/88 4 1.2 0 0 7. T. CALVERT CRILL MAD 6430 5/01/88 22.4 14.4 32.1 HODDOO MEADON 6500 4/26/88 26 9.0 .4 11. CARROT BASIN 7890 4/28/88 19 5.6 2.4 9.2 HODD MEADON 6500 4/26/88 26 9.0 .4 11. CARROT BASIN 9000 5/01/88 22.4 14.4 32.1 HODDOO BASIN PILLON 6505 6/01/88 35.0 29.0 29 CARROT BASIN 9000 4/26/88 73 24.8 16.1 41.7 HODDOO BASIN PILLON 6505 4/30/88 90 42.6 31.1 53 CESSAN RESERVOIR 6200 4/27/88 3 .8 .0 2.7 HODDOO CREEK 5900 4/30/88 80 35.5 27.2 49 CESSAN RESERVOIR 6200 4/27/88 3 .8 .0 2.7 HODDOO CREEK 5900 4/30/88 80 35.5 27.2 49 CHICKEN CREEK 4050 4/26/88 0 .0 0 .0 3.8 INTERGABLD 6450 4/26/88 11 1.8 5.8 12 CLOVER HOM PILLON 8800 5/01/88 13.8 7.1 19.0 JANKE LAKE TRAIL 7200 4/26/88 22 6.0 0 .0 9. CLOVER HOM PILLON 8800 4/27/88 30 15.4 14.1 1.2 CLOVER HOM PILLON 8800 4/27/88 30 15.4 14.1 1.2 CLOVER HOM PILLON 8800 4/27/88 30 15.4 14.1 1.2 CLOVER HOM PILLON 8800 4/27/88 30 15.4 14.1 1.2 CLOVER HEADON 8800 4/26/88 10 2.8 .0 4.2 KINSTAN RESEARCH 7850 4/26/88 20 7.7 4.2 15.0 CLOVER HEADON 8800 4/26/88 10 2.8 .0 4.2 KINSTAN RESEARCH 7850 4/26/88 20 7.7 4.2 15.0 COMBINATION 9500 5/01/88 16.2 13.2 20.6 KINSTAN RESEARCH 7850 4/26/88 20 7.7 6 0 0 2 COMBINATION 9500 5/01/88 16.2 13.2 20.6 KINSTAN RESEARCH 7850 4/26/88 20 7.7 6 0 0 2 COMBINATION 9500 5/01/88 16.2 13.2 20.6 KINSTAN RESEARCH 7850 4/26/88 20 7.7 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				•					HAND CREEK PILLOW	5030	5/01/88		3.5	1.7	9.1
CALL ROAD  SOS 4/27/88 0 0 0 0 2.2  HEART LAKE TRAIL 4800 4/30/88 22 9.6 2.7 17.  CALVERT CREEK  6430 4/28/88 14 4.6 0 9.6  HELEGEN DAN 6550 4/26/88 4 1.2 0 7.  CALVERT CREILLON 6430 5/01/88 0 0 0 2.5  CAPP MISERY  6400 4/28/88 19 5.6 2.4 9.2  CAPP SENIA 7890 4/28/88 19 5.6 2.4 9.2  CARROT BASIN PILLON 9000 5/01/88 22.4 14.4 32.1 HODD HEADON 6500 4/26/88 26 9.0 4 1.2  CARROT BASIN PILLON 7800 4/26/88 73 24.8 16.1 41.7 HODDONO BASIN PILLON 6050 5/01/88 35.0 29.0 43  CARROT BASIN 7800 4/28/88 19 5.6 2.4 9.2  CARROT BASIN PILLON 7800 5/01/88 7.9 2.4 10.5  CARROT BASIN 7800 4/28/88 19 5.6 2.4 9.2  CARROT BASIN PILLON 8000 5/01/88 7.9 2.4 10.5  CARROT BASIN PILLON 8000 5/01/88 13.8 1.0 2.7  CHICKEN CREEK 4060 4/27/88 3 .8 0.0 2.7  CHICKEN CREEK 4060 4/27/88 3 .8 0.0 2.7  CHICKEN CREEK 4060 4/27/88 3 .8 1.0 2.7  CHICKEN CREEK 4060 4/27/88 3 .8 1.0 2.7  CHICKEN CREEK 4060 4/27/88 3 .8 1.0 2.7  CHICKEN CREEK 4060 4/27/88 37 13.1 6.8 20.6  CULOUR MOND PILLON 8000 5/01/88 13.8 7.1 19.0  CULOUR MOND PILLON 8000 5/01/88 13.8 7.1 19.0  CULCE CREEK FILLON 7850 5/01/88 13.8 7.1 19.0  CULCE CREEK FILLON 7850 5/01/88 13.8 1.6 1.0 23.3  COLE CREEK FILLON 7850 5/01/88 15.4 16.0 23.3  COLE CREEK FILLON 7850 5/01/88 15.2 13.2 20.6  COLE CREEK FILLON 7850 5/01/88 15.2 13.2 20.6  COLE CREEK FILLON 5500 4/27/88 30 1.0 2.8 1.															30.1
CALL ROAD 8050 4/27/88 28 8.6 4.9 13.9 HEBGEN DAM 6550 4/26/88 4 1.2 0 0.7 CALVERT CREEK 6330 4/28/88 14 4.6 .0 9.6 HELL ROARING DIVIDE 5770 4/26/88 45 19.0 18.4 31 CALVERT CR PILLON 6330 5/01/88 0 0 2.5 HELL ROARING DIVIDE 5770 4/26/88 38 15.4 14.4 2.5 CAMP HISERY 6400 4/24/88 79 33.6 31.3 53.9 HB. SROWK 4530 5/02/88 0 .0 0 .0 2.5 CAMP SENIA 7890 4/28/88 19 5.6 2.4 9.2 HD. SROWK 4530 5/02/88 0 .0 0 .0 2.5 CAMP SENIA 7890 4/26/88 79 33.6 31.3 53.9 HB. SROWK 4530 5/02/88 0 .0 0 .0 2.5 CAMP SENIA 7890 4/26/88 79 24.4 14.4 32.1 HD. SROWK 4530 5/02/88 26 9.0 .4 21.2 CARROT 8ASIN PILLON 9000 5/01/88 22.4 14.4 32.1 HD. SROWK 4530 5/02/88 90 4.2 6.5 31.1 53.0 CARROT 8ASIN 9000 4/26/88 73 24.8 16.1 41.7 HD. SROWK 4530 5/02/88 90 4.2 6.5 31.1 53.0 CASHE CREEK PILLON 7800 5/01/88 7.9 2.4 10.5 HD. SROWK 4530 5/02/88 90 4/30/88 90 42.6 31.1 53.0 CASHE CREEK PILLON 7800 5/01/88 7.9 2.4 10.5 HD. SROWK 4530 5/01/88 80 35.5 27.2 49.2 CEDAR GROVE 3760 4/24/88 4 1.2 .0 6.1 ICEBESG LAKE NO 3 5600 4/27/88 39 16.8 16.1 31. CHICKEN CREEK 4060 4/26/88 60 .0 0.0 3.8 INTERGARAND 4/27/88 31 11.8 5.8 15.1 CHICKEN CREEK 4060 4/26/88 13.8 7.1 19.0 INTERGARAND 4/27/88 31 11.8 5.8 15.1 CLOVER MEADOWN 8500 4/27/88 37 13.1 6.8 20.6 JD. SROWK 4500 4/26/88 22 6.0 0.0 COLC CREEK PILLON 7850 5/01/88 16.2 13.2 20.6 KELLER CREEK 7850 4/27/88 30 10.2 8.8 10.0 CLOVER MEADOWN 8500 4/28/88 10 2.8 10 4.2 KELLER CREEK 3300 4/26/88 20 7.7 4.2 15. COLE CREEK FILLON 7850 5/01/88 16.2 13.2 20.6 KELLER CREEK S100 4/26/88 20 7.7 4.2 15. COLE CREEK FILLON 7850 5/01/88 16.2 13.2 20.6 KELLER CREEK S100 4/26/88 20 7.7 4.2 15. COLE CREEK FILLON 7850 5/01/88 16.2 13.2 20.6 KELLER CREEK S100 4/26/88 20 7.7 4.2 15. COHBINATION 5500 5/01/88 16.2 13.2 20.6 KELLER CREEK S100 4/26/88 20 7.7 4.2 15. COPER BOTTOM FILLON 5500 5/01/88 16.2 13.2 20.6 KELLER CREEK FILLON 7850 5/01/88 16.2 13.2 20.6 KELLER CREEK FILLON 7850 5/01/88 16.2 13.2 20.6 KELLER CREEK S100 4/26/88 20 7.7 4.2 15. COPER BOTTOM FILLON 5500 5/01/88 16.2															32.8
CALVERT CR PILLON 6430 5/01/88 0.0 0.0 2.5 HERRIG JUNCTION 4/850 4/26/88 35 15.4 14.4 25.1 CAMP SENIA 7990 4/26/88 19 5.6 2.4 9.2 HO.S.ROUK 4530 5/02/88 0 0.0 0.0 2.0 CAMP SENIA 7990 4/26/88 19 5.6 2.4 9.2 HO.S.ROUK 4530 5/02/88 0 0.0 0.0 2.0 CAMP SENIA 7990 4/26/88 19 5.6 2.4 9.2 HO.S.ROUK 4530 5/02/88 0 0.0 0.0 2.0 CAMP SENIA 7990 4/26/88 27 24.8 16.1 41.7 HO.S.COURD RASIN PILLON 6050 5/01/88 35.0 29.0 49.0 CASHE CREEK PILLON 7800 5/01/88 7.9 2.4 10.5 HO.S.COURD RASIN FILLON 6050 4/30/88 90 42.6 31.1 53.0 CEDAR GROVE 3760 4/24/88 4 1.2 0.0 6.1 ICEBERG LAKE NO 3 5600 4/27/88 39 16.8 16.1 31.1 CHICKEN CREEK 4060 4/26/88 3 .8 0.0 2.7 INSPENDENCE 7850 4/27/88 39 16.8 16.1 31.1 S.8 13.1 CLOVER MORPHILLON 8000 4/26/88 77 13.1 6.8 20.6 JOHNSON PILLON 8000 4/26/88 14 4.1 1.9 0.0 CLOVER MEADON 8000 4/27/88 50 15.4 16.0 23.3 JOHNSON PARK 6450 4/26/88 22 6.0 0.0 9.0 CLOVER MEADON 8000 4/27/88 50 15.4 16.0 23.3 JOHNSON PARK 6450 4/26/88 22 6.0 0.0 9.0 CLOVER MEADON 8000 4/26/88 10 2.8 0.0 4.2 KEELER CREEK PILLON 7850 4/27/88 50 15.4 16.0 23.3 JOHNSON PARK 6450 4/26/88 20 7.7 4.2 13.0 COURT CREEK FILLON 7850 4/27/88 50 15.4 16.0 23.3 JOHNSON PARK 6450 4/26/88 20 7.7 4.2 13.0 COURT SETATION 8500 4/26/88 0 0.0 0.0 3.5 KIRANIS CAMP 3700 4/26/88 20 7.7 4.2 13.0 CONBINATION PILLON 8500 4/26/88 0 0.0 0.0 3.5 KIRANIS CAMP 3700 4/26/88 20 7.7 4.2 13.0 COMBINATION PILLON 8500 5/01/88 16.2 5.9 21.4 LAKE CREEK FILLON 8500 5/01/88 0.0 0.1 KIRATIC CREEK FILLON 8500 5/01/88 0.0 0.0 1.1 KRATIC CREEK FILLON 8500 5/01/88 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0															7.6
CAMP MISERY 6400 4/28/88 79 33.6 31.3 53.9 HERRIG JUNI 4990 4/28/88 50 15.4 1.4 2.5 CAMP SENIA 7890 4/28/88 19 5.6 2.4 9.2 HO.S. SOOK 4530 5/02/88 0 0.0 4.2 1.1 CARROT BASIN PILLDW 9000 5/01/88 22.4 14.4 32.1 HO.S. DOOD BASIN PILLDW 6050 5/01/88 35.0 29.0 49 CARROT BASIN 9000 4/26/88 73 24.8 16.1 41.7 HO.D. BASIN PILLDW 6050 5/01/88 35.0 29.0 49 CARROT BASIN 9000 4/26/88 7.9 2.4 10.5 HO.D. BASIN 6050 4/30/88 90 42.6 31.1 53 CASHE CREEK PILLDW 7800 5/01/88 7.9 2.4 10.5 HO.D. CREEK 5900 4/30/88 80 35.5 27.2 49 CEDAR GROVE 3760 4/27/88 3 1.8 0.0 2.7 IDEA CASHE CREEK FOR CREEK 711.0 BASIN 7.1 19.0 LONG FROM 6050 5/01/88 13.8 7.1 19.0 LONG FROM 6050 4/27/88 31 11.8 5.8 18 CLOVER MOW PILLDW 8800 5/01/88 13.8 7.1 19.0 LONG FROM 6050 4/27/88 31 11.8 5.8 18 CLOVER MOW PILLDW 8800 4/27/88 50 15.4 16.0 23.3 JOHNSON PARK 6450 4/26/88 22 6.0 0.0 9 CLOVER MEADOW 8800 4/27/88 50 15.4 16.0 23.3 JOHNSON PARK 6450 4/26/88 27 6.6 0.0 2 CLOVER MEADOW 8800 4/27/88 50 15.4 16.0 23.3 JOHNSON PARK 6450 4/26/88 20 7.7 4.2 15.0 COLE CREEK 6300 4/28/88 10 2.8 0.0 4.2 KELET ROLL 7500 4/28/88 32 12.0 9.0 16.0 COMBINATION PILLOW 5600 5/01/88 16.2 13.2 20.6 KELET CREEK 3900 4/28/88 32 12.0 9.0 16.0 COMBINATION 5600 4/26/88 0 0.0 0.0 3.5 KINAS HILL 7500 4/28/88 32 12.0 9.0 16.0 COMBINATION 91LLOW 5600 5/01/88 0.0 0.0 2.1 KRAFT CREEK PILLOW 7500 4/27/88 0 0.0 0.0 0.0 3.5 KINAS HILL 7500 4/28/88 32 12.0 9.0 16.0 COPPER BOTTOM 5200 4/27/88 3 1.0 0.0 4.9 LAWEVEH ROLD FILLOW 500 5/01/88 3.0 0.0 6.8 LAKEVIEW ROLD FILLOW 7400 5/01/88 0.0 0.0 4.2 COPPER BOTTOM 5200 4/27/88 3 1.0 0.0 4.9 LAWEVEH ROLD FILLOW 7400 5/01/88 0.0 0.0 4.2 COPPER BOTTOM 5200 4/27/88 3 1.0 0.0 0.0 3.3 KINAS HILL 7500 4/28/88 25 7.6 2.8 10.0 COPPER BOTTOM 5000 4/27/88 48 21.4 13.5 30.6 LAKEVIEW ROLD FILLOW 7400 5/01/88 0.0 0.0 4.2 COPPER BOTTOM 5000 4/27/88 30 1.0 0.0 0.0 3.3 LAKEVIEW ROLD FILLOW 7400 5/01/88 0.0 0.0 4.2 COPPER BOTTOM 5000 4/27/88 48 21.4 13.5 30.6 LAKEVIEW ROLD FILLOW 7400 5/01/88 0.0 0.0 4.2 COPPER B															31.6
CARP SENIA 7890 4/28/88 19 5.6 2.4 9.2 HOD MEADON 4930 3758 0 .0 .0 .0 .2 .2 CARROT BASIN PILLOW 9000 5/01/88 22.4 14.4 32.1 HOD MEADON 6660 4/26/88 26 9.0 .4 11.   CARROT BASIN PILLOW 7800 5/01/88 7.9 2.4 10.5 HODDOO BASIN 6050 5/01/88 35.0 29.0 43 12.   CASHE CREEK PILLOW 7800 5/01/88 7.9 2.4 10.5 HODDOO BASIN 6050 4/30/88 90 42.6 31.0 12.0 12.5 HODDOO CREEK 5900 4/30/88 80 35.5 27.2 49 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0															25.0
CARROI BASIN 9000 4/26/88 22.4 14.4 32.1 H00000 BASIN PILLOH 6050 5/01/88 35.0 29.0 49. CARROI BASIN 9000 4/26/88 73 24.8 16.1 41.7 H00000 BASIN FILLOH 6050 5/01/88 90 42.6 31.1 53. CARROI BASIN 9000 4/26/88 10 2.8 10.5 H00000 CREEK 5900 4/30/88 80 95.5 27.2 49. CEDAR GROVE 3760 4/24/88 4 1.2 .0 6.1 ICEBERG LAKE NO 3 5600 4/27/88 39 16.8 16.1 31. CHICKEN CREEK 4060 4/26/88 0 .0 .0 .0 3.8 INTERGARRO 6450 4/26/88 31 11.8 5.8 13. CLIOVER MDM PILLOH 8800 5/01/88 13.8 7.1 19.0 JAHNKE LAKE TRAIL 7200 4/26/88 14 4.1 1.1 8. CLIOVER MEADON BEGON 4/27/88 37 13.1 6.8 20.6 JAHNKE LAKE TRAIL 7200 4/26/88 22 6.0 .0 9. CLIOVER MEADON BEGON 4/27/88 50 15.4 16.0 23.3 JCSPHINE LONGEN NO 9 4000 4/26/88 22 6.0 .0 9. CLIOVER CREEK PILLOH 7850 5/01/88 16.2 13.2 20.6 KELER CREEK 3000 4/26/88 20 7.7 42.2 15. CLIOVER CREEK 6300 4/28/88 10 2.8 .0 4.2 KINGS HILL 7500 4/26/88 20 1.0 .0 .0 1. CLIOVER CREEK 6300 4/28/88 0 2.8 .0 4.2 KINGS HILL 7500 4/26/88 20 1.0 .0 .0 1. CLIOVER CREEK 6300 4/28/88 30 1.0 .0 .0 2.1 KRAFT CREEK FILLOH 7550 5/01/880 .0 .0 2.2	CAMP SENIA		4/28/88		5.6	2.4	9.2					-			2.0 :!.4
CASHE CREEK PILLOW 7800 5/01/88 7.9 2.4 10.5 HOUDDUS SASIN 6050 4/30/88 80 35.5 27.2 42 60.5 CEDAR GROVE 3760 4/24/88 4 1.2 .0 6.1 HOUDDUS CREEK 5900 4/30/88 80 35.5 27.2 43 60.5 CHICKEN CREEK 4060 4/27/88 3 .8 .0 2.7 INDEPENDENCE 7850 4/27/88 39 16.8 16.1 31. CHICKEN CREEK 4060 4/26/88 0 .0 .0 3.8 INTERGAARD 6450 4/27/88 31 11.8 5.8 18. CLIOVER MEADOW 8600 5/01/88 13.8 7.1 19.0 JAHNKE LAKE TRAIL 7200 4/26/88 22 6.0 .0 9. CLIOVER MEADOW 8600 4/27/88 37 13.1 6.8 20.6 JAHNKE LAKE TRAIL 7200 4/26/88 7 .6 .0 2. CLIOVER MEADOW 8600 4/27/88 50 15.4 16.0 23.3 JCSEPHINE LOWER NO.9 4900 4/26/88 20 7.7 4.2 15. CLIOVER CREEK 6300 4/26/88 10 2.8 .0 4.2 KINGS HILL 7500 4/28/88 0 .0 .0 .0 1.0 1.0 CLIOVER CREEK 6300 4/26/88 0 .0 .0 .0 3.5 KINGS HILL 7500 4/28/88 32 12.0 .9 16. COMBINATION PILLOW 5600 5/01/880 .0 2.1 KRAFT CREEK FILLOW 7500 4/27/88 0 .0 .0 .0 COMBINATION 8500 5/01/880 .0 2.1 KRAFT CREEK FILLOW 8500 5/01/880 .0 2.1 KRAFT CREEK FILLOW 8500 5/01/880 .0 2.1 KRAFT CREEK FILLOW 8500 5/01/880 .0 2.1 KRAFT CREEK FILLOW 8500 5/01/880 .0 2.1 KRAFT CREEK FILLOW 8500 5/01/880 .0 4.9 LAKEVIEW RORD PILLOW 5500 5/01/88 23.2 8.6 33.5 LAKEVIEW RORD PILLOW 5501/882 .0 .0 3.5 COPPER BOTTOM 5200 4/27/88 3 1.0 .0 4.9 LAKEVIEW RORD PILLOW 5501/882 .0 .0 .0 6.8 LAKEVIEW RORD PILLOW 5501/882 .0 .0 9. COPPER CREEK 5700 4/27/88 48 21.4 13.5 30.6 LEMHI ROSE PILLOW 7500 5/01/882 .0 .0 9. COPPER CREEK 5700 4/27/88 80 .0 .0 .0 2.9 1.0 COPPER CREEK 5700 4/27/88 80 .0 .0 .0 2.9 1.0 COPPER MUNTAIN 7700 4/25/88 20 5.9 .7 11.8 LEMHI RIDGE 8100 4/26/88 25 7.6 2.8 1.0 COPPER MUNTAIN 7700 4/25/88 0 .0 .0 .0 3.3 LICK CREEK FILLOW 6860 5/01/889 .0 .0 1.2 SCOPPER MUNTAIN 7700 4/25/88 0 .0 .0 .0 3.3 LICK CREEK FILLOW 6860 5/01/880 .0 .0 3.3 LICK CREEK FILLOW 6860 5/01/880 .0 .0 3.3 LICK CREEK FILLOW 6860 5/01/880 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0									HOODOO BASIN PILLOW						43.6
CEDAR GROVE 3760 4/24/88 4 1.2 .0 6.1 HUJDUG CREEK 5900 4/26/88 39 16.8 16.1 31 CHESSMAN RESERVOIR 6200 4/27/88 3 .8 .0 2.7 INDEPENDENCE 7850 4/27/88 31 11.8 5.8 13. CHICKEN CREEK 460 4/26/88 0 .0 .0 .3.8 INTERGARRD 6450 4/26/88 11 4 4.1 .1 .8 5.8 13. CLIOVER MDW PILLOW 8800 5/01/88 13.8 7.1 19.0 JAHNKE LAKE TRAIL 7200 4/26/88 22 6.0 .0 .9 GLOVER MEADOW 8600 4/27/88 37 13.1 6.8 20.6 JOANSON PARK 6450 4/26/88 7 .6 .0 .0 .0 .9 CLOVER CREEK 7850 4/27/88 50 15.4 16.0 23.3 JOANSON PARK 6450 4/26/88 7 .6 .0 .0 .2 COLE CREEK PILLOW 7850 5/01/88 16.2 13.2 20.6 KEELER CREEK 3300 4/26/88 0 .0 .0 .0 .0 .1 COLEY CREEK 6300 4/26/88 10 2.8 .0 4.2 KINGS HILL 7500 4/28/88 32 12.0 .9 16 COMBINATION DILLOW 5500 5/01/88 0.0 .0 2.1 KRAFT CREEK PILLOW 5500 5/01/88 0.0 .0 2.1 KRAFT CREEK PILLOW 750 5/01/88 0.0 .0 2.1 KRAFT CREEK PILLOW 750 5/01/88 0.0 .0 2.1 KRAFT CREEK PILLOW 750 5/01/88 0.0 .0 2.1 COMPER BOTTOM 5200 4/27/88 3 1.0 .0 4.9 LAKE CREEK FILLOW 750 5/01/88 0.0 .0 2.1 COMPER BOTTOM 5200 4/27/88 3 1.0 .0 4.9 LAKE CREEK FILLOW 750 5/01/88 0.0 .0 4.2 COMPER BOTTOM 5200 4/27/88 3 1.0 .0 4.9 LAKE CREEK FILLOW 750 5/01/88 2.2 0.0 .0 COMPER BOTTOM 5200 4/27/88 48 21.4 13.5 30.6 LAKE UNIN FILLOW 5500 5/01/88 23.2 8.6 33.5 LAKE UNIN FILLOW 6950 5/01/88 23.2 8.6 33.5 LAKE UNIN F															53.2
CHICKEN CREEK 4060 4/26/88 0 .0 .0 .3.8 INTERGARD 6450 4/26/88 11.1.8 5.8 18.  CLOVER MOW PILLOW 8800 5/01/88 13.8 7.1 19.0 JANKE LAKE TRAIL 7200 4/26/88 14 4.1 .1 8.  CLOVER MEADOW 8600 4/27/88 37 13.1 6.8 20.6 JANKE LAKE TRAIL 7200 4/26/88 22 6.0 .0 9.  COLE CREEK 7850 4/27/88 50 15.4 16.0 23.3 JOSEPHINE LOWER NO.9 4900 4/26/88 7 .6 .0 2.  COLE CREEK PILLOW 7850 5/01/88 16.2 13.2 20.6 KEELER CREEK 3300 4/24/88 0 .0 .0 .0 1.  COLLEY CREEK 6300 4/26/88 10 2.8 .0 4.2 KINGS HILL 7500 4/28/88 32 12.0 .9 16.  COMBINATION 5600 4/26/88 0 .0 .0 .3.5 KIWANIS CAMP 3720 4/27/88 0 .0 .0 .0  COMBINATION 91LLOW 5600 5/01/880 .0 2.1 KRAFT CREEK PILLOW 4750 5/01/880 .0 .0 2.1  COMPER BOTTOM 5200 4/27/88 3 1.0 .0 4.9 LAKE CREEK 6100 4/27/88 0 .0 .0 .0 3.  COPPER BOTTOM PILLOW 5200 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 7400 5/01/882 .0 .0 .0 .0  COPPER BOTTOM PILLOW 5200 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 7400 5/01/882 .0 .0 .0  COPPER CAMP PILLOW 6950 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 7400 5/01/882 .0 .9  COPPER CAMP FILLOW 6950 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 7400 5/01/882 .0 .9  COPPER CAMP FILLOW 6950 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 7400 5/01/882 .0 .9  COPPER CAMP FILLOW 6950 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 7400 5/01/882 .0 .9  COPPER CAMP FILLOW 6950 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 7400 5/01/882 .0 .9  COPPER CAMP FILLOW 6950 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 7400 5/01/882 .0 .9  COPPER CAMP FILLOW 6950 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 5/01/882 .0 .9  COPPER CAMP FILLOW 6950 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 5/01/882 .0 .9  COPPER CAMP FILLOW 6950 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 5/01/882 .0 .9  COPPER CAMP FILLOW 6950 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 5/01/882 .0 .9  COPPER CAMP 6950 5/01/88 33.0 .0 6.8 LAKEVIEW ROG. PILLOW 6860 5/01/882 .0 .9  COPPER CAMP 6950 5/01/88 33.0 .0 .0 .0	CEDAR GROVE			4											49.3 31.0
CLOVER MOW PILLOW 8800 5/01/88 13.8 7.1 19.0 JAHNKE LAKE TRAIL 7200 4/26/88 14 4.1 .1 9. CLOVER MEADOW 8800 4/27/88 37 13.1 6.8 20.6 JAHNKE LAKE TRAIL 7200 4/26/88 22 6.0 .0 9. CLOVER MEADOW 8800 4/27/88 37 13.1 6.8 20.6 JAHNKE LAKE TRAIL 7200 4/26/88 22 6.0 .0 9. CLOVER MEADOW 8800 4/27/88 50 15.4 16.0 23.3 JCSEPHINE LOWER NO.9 4900 4/26/88 20 7.7 4.2 16.0 COLLEY CREEK 6300 4/28/88 10 2.8 .0 4.2 KEELER CREEK 3300 4/24/88 0 .0 .0 .0 1. COLLEY CREEK 6300 4/26/88 0 .0 .0 .0 3.5 KINGS HILL 7500 4/28/88 32 12.0 .9 16. COMBINATION 5600 4/26/88 10 .0 2.1 KRAFT CREEK PILLOW 750 5/01/880 .0 2.1 KRAFT CREEK PILLOW 750 5/01/88 0 .0 .0 .0 4.2 COME STATION 8150 5/02/88 45 16.2 5.9 21.4 LAKE CREEK 6100 4/27/88 0 .0 .0 .0 3.5 COPPER BOTTOM PILLOW 5200 5/01/88 3.0 .0 6.8 LAKEVIEW ROG. PILLOW 7400 5/01/882 3.2 8.6 33.5 LAKEVIEW ROG. PILLOW 7400 5/01/882 2.0 0. COPPER CAMP PILLOW 6950 5/01/88 23.2 8.6 33.5 LAKEVIEW RIGGE 7400 5/01/882 2.0 0. COPPER CAMP 6950 4/27/88 16 6.8 .0 10.1 LEMHI RIDGE 8100 4/26/88 10 3.2 .8 7. COPPER CREEK 5700 4/27/88 16 6.8 .0 10.1 LEMHI RIDGE 8100 4/26/88 25 7.6 2.8 10. COPPER CREEK 6400 4/25/88 20 5.9 .7 11.8 LEMHI RIDGE 8100 4/26/88 25 7.6 2.8 10. COPPER CREEK 6400 4/25/88 25 10.8 .0 10.1 LEMHI RIDGE PILLOW 6950 5/01/88 9.2 .8 10. COPPER CREEK 6400 4/25/88 25 10.8 .0 12.9 LITCK CREEK 6400 4/25/88 35 11.0 4.6 17. COPPER HILL 4200 4/25/88 25 10.8 .0 12.9 LITCK CREEK 6400 4/25/88 35 11.0 4.6 17. COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LITCK CREEK 6860 4/26/88 33 10.2 2.4 10. COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LITCK CREEK 6400 4/25/88 35 11.0 4.6 17. COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LITCK CREEK 6400 4/25/88 35 11.0 4.6 17. COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LITCK CREEK 6400 4/25/88 35 11.0 4.6 17. COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LITCK CREEK 6400 4/25/88 35 11.0 4.6 17. COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LITCK CREEK 6400 4/25/88 35 11.0 4.6 17. COPPER LAKE PILLOW 6050 5/01/88 9.0															18.2
CLOVER MEADOW 8600 4/27/88 37 13.1 6.8 20.6 JGHNSON PARK LAKE IMAIL 7/200 4/26/88 22 5.0 0.0 9 COLE CREEK 7850 4/27/88 50 15.4 16.0 23.3 JGHNSON PARK 6450 4/26/88 7 6.6 0.0 2 COLE CREEK PILLOW 7850 5/01/88 16.2 13.2 20.6 KELER CREEK 3300 4/26/88 20 7.7 4.2 15.6 COLLEY CREEK 6300 4/28/88 10 2.8 0 4.2 KINGS HILL 7500 4/28/88 32 12.0 9 16 COMBINATION 5600 4/26/88 0 0.0 0.3.5 KINGS HILL 7500 4/28/88 32 12.0 9 16 COMBINATION PILLOW 5600 5/01/88 0.0 0.2.1 KRAFT CREEK PILLOW 4750 5/01/88 0.0 0.0 COMBINATION B150 5/02/88 45 16.2 5.9 21.4 KRAFT CREEK PILLOW 4750 5/01/88 0.0 0.0 4.2 COPPER BOTTOM 5200 4/27/88 3 1.0 0.4.9 LAKEVIEW CAMPON 6930 5/01/88 0 0.0 0.0 3.5 COPPER CAMP PILLOW 5000 5/01/88 23.2 8.6 33.5 LAKEVIEW ROG. PILLOW 7400 5/01/88 2.0 0.9 COPPER CAMP B1LLOW 6950 5/01/88 23.2 8.6 33.5 LAKEVIEW ROG. PILLOW 7400 5/01/88 2.0 0.9 COPPER CAMP 6950 4/27/88 48 21.4 13.5 30.6 LAKEVIEW ROG. PILLOW 7400 5/01/88 2.0 0.9 COPPER CREEK 5700 4/27/88 48 21.4 13.5 30.6 LAKEVIEW ROG. PILLOW 7400 5/01/88 2.0 0.9 COPPER CREEK 5700 4/27/88 48 21.4 13.5 30.6 LAKEVIEW ROG. PILLOW 7400 5/01/88 2.0 0.9 COPPER CREEK 5700 4/27/88 48 21.4 13.5 30.6 LAKEVIEW ROG. PILLOW 7400 5/01/88 2.0 0.9 COPPER CREEK 5700 4/27/88 48 21.4 13.5 30.6 LAKEVIEW ROG. PILLOW 7400 5/01/88 2.0 0.9 COPPER CREEK 5700 4/27/88 48 21.4 13.5 30.6 LAKEVIEW ROG. PILLOW 7400 5/01/88 2.0 0.9 COPPER CREEK 5700 4/27/88 16 6.8 0.0 10.1 LEMHI RIDGE 8100 4/26/88 25 7.6 2.8 10.0 COPPER CREEK 5700 4/25/88 20 5.9 .7 11.8 LEMHI RIDGE 8100 4/26/88 25 7.6 2.8 10.0 COPPER CREEK 6400 4/25/88 0 0.0 0.0 3.3 LICK CREEK FILLOW 6860 5/01/88 9.2 8 10.0 COPPER HILL 4200 4/25/88 25 10.8 0.0 12.9 LICK CREEK FILLOW 6860 5/01/88 9.2 8 10.0 COPPER LAKE FILLOW 6050 5/01/88 9.0 0.0 12.5 LICK CREEK FILLOW 6860 5/01/88 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0				-						6450	4/26/88	14		.1	8.0
COLE CREEK 7850 4/27/88 50 15.4 16.0 23.3 JUSEPHINE LOWER NO 9 4900 4/26/88 20 7.7 4.2 16.0 COLE CREEK PILLOW 7850 5/01/88 16.2 13.2 20.6 KEELER CREEK 3300 4/24/88 0 .0 .0 .0 1.0 COLLEY CREEK 6300 4/26/88 10 2.8 .0 4.2 KINGS HILL 7500 4/28/88 32 12.0 .9 16.0 COMBINATION 5600 4/26/88 0 .0 .0 .0 3.5 KIWANIS CAMP 3720 4/27/88 0 .0 .0 .0 COMBINATION PILLOW 5600 5/01/880 .0 2.1 KRAFT CREEK PILLOW 4750 5/01/880 .0 4.9 COMPER BOTTOM 5200 4/27/88 3 1.0 .0 4.9 LAKEVIEW CANYON 6930 5/01/88 0 .0 4.2 12.0 COPPER BOTTOM PILLOW 5200 5/01/88 33.0 .0 6.8 LAKEVIEW ROG, PILLOW 7400 5/01/88 0 .0 4.2 12.0 COPPER CAMP PILLOW 6950 5/01/88 23.2 8.6 33.5 LAKEVIEW ROG, PILLOW 7400 5/01/88 0 .0 4.2 12.0 COPPER CAMP PILLOW 6950 4/27/88 48 21.4 13.5 30.6 LAKEVIEW ROG, PILLOW 7400 5/01/88 0 .0 2.9 10.0 COPPER MOUNTAIN 7700 4/25/88 20 5.9 .7 11.8 LEMHI RIDGE 7400 5/01/88 20 9.0 COPPER MOUNTAIN 7700 4/25/88 20 5.9 .7 11.8 LEMHI RIDGE 8100 4/26/88 25 7.6 2.8 10.0 COPPER MOUNTAIN 7700 4/25/88 20 5.9 .7 11.8 LEMHI RIDGE PILLOW 8100 5/01/88 9.2 .8 10.0 COPPER HILL 4200 4/25/88 25 10.8 .0 12.9 LITTLE PARK 7400 4/25/88 35 11.0 4.6 17.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LOGAN CREEK 4300 4/26/88 35 11.0 4.6 17.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LOGAN CREEK 4300 4/26/88 35 11.0 4.6 17.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LOGAN CREEK 4300 4/26/88 0 .0 .0 .0 2.9 10.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LOGAN CREEK 4300 4/26/88 0 .0 .0 .0 2.9 10.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LOGAN CREEK 4300 4/26/88 0 .0 .0 .0 .0 2.0 10.0 10.0 10.0 10.0 1															9.2
COLLEY CREEK   FILLOW   7850   5701788     16.2   13.2   20.5     KEELER CREEK   3300   4/24/88   0   .0   .0   .0   .1    COLLEY CREEK   6300   4/28/88   10   2.8   .0   4.2   KINGS HILL   7500   4/28/88   32   12.0   .9   16    COMBINATION   5600   4/26/88   0   .0   .0   .0   .3.5   KINGS HILL   7500   4/28/88   32   12.0   .9   16    COMBINATION   FILLOW   5600   5/01/88     .0   .0   2.1   KRAFT CREEK   FILLOW   4750   5/01/88     .0   .0    COME STATION   8150   5/02/88   45   16.2   5.9   21.4   LAKE CREEK   FILLOW   4750   5/01/88     .0   .0   .0    COPPER BOTTOM   5200   4/27/88   3   1.0   .0   4.9   LAKEVIEW CANYON   6930   5/01/88   0   .0   .0   .0    COPPER BOTTOM   FILLOW   5200   5/01/88     23.2   8.6   33.5   LAKEVIEW ROG. PILLOW   7400   5/01/88   0   .0   2.9   .0    COPPER CAMP   FILLOW   6950   5/01/88   48   21.4   13.5   30.6   LAKEVIEW ROG. PILLOW   7400   5/01/88   0   .0   2.9   .0    COPPER CREEK   5700   4/27/88   48   21.4   13.5   30.6   LAKEVIEW RIGGE   7400   5/01/88   0   .0   2.9   .0    COPPER CREEK   5700   4/27/88   20   5.9   .7   11.8   LEMHI RIGGE   8100   4/26/88   25   7.6   2.8   .0    COTTONWOOD CREEK   6400   4/29/88   18   6.6   .0   8.4   LICK CREEK PILLOW   6860   5/01/88     9.2   .8   .0    COYDTE HILL   4200   4/25/88   25   10.8   .0   12.9   LITTLE PARK   7400   4/25/88   35   11.0   4.6   27.    CRYSTAL LAKE   FILLOW   6050   5/01/88     9.0   .0   12.5   LITTLE PARK   7400   4/25/88   35   11.0   4.6   27.    COLOURS KINATION   15.00   12.5   LOSAN CREEK   4300   4/26/88   0   .0   .0   2.0   2.0    COLOURS STATION   15.00   15.00   12.5   LOSAN CREEK   4300   4/26/88   0   .0   .0   2.0   2.0    CONDET STATION   15.00   15.00   15.00   12.5   LOSAN CREEK   4300   4/26/88   0   .0   .0   2.0   2.0    COPPER SOTTOM   15.00			4/27/88	50		16.0	23.3								2.6 :6.5
COMBINATION 5600 4/26/88 0 .0 .0 3.5 KINANIS CAMP 3720 4/27/88 0 .0 .0 .0 COMBINATION PILLOW 5600 5/01/880 .0 .0 2.1 KRAFT CREEK PILLOW 4750 5/01/880 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0															1.2
COMBINATION PILLOW 5600 5/01/880 .0 2.1 KRAFIT CREEK PILLOW 4750 5/01/880 .0 4.0 COPER SOTTOM 8150 5/02/88 45 16.2 5.9 21.4 LAKE CREEK FILLOW 4750 5/01/880 .0 4.0 COPER SOTTOM 5200 4/27/88 3 1.0 .0 4.9 LAKEVIEW CANYON 6930 5/01/88 0 .0 4.2 12.0 COPPER CAMP PILLOW 6950 5/01/88 23.2 8.6 33.5 LAKEVIEW RDG. PILLOW 7400 5/01/882 .0 9.0 COPPER CAMP 6950 4/27/88 48 21.4 13.5 30.6 LAKEVIEW RIGGE 7400 5/01/88 0 .0 2.9 10.0 COPPER CREEK 5700 4/27/88 48 21.4 13.5 30.6 LEMHI RIGGE 7400 5/01/88 0 .0 2.9 10.0 COPPER CREEK 5700 4/27/88 16 6.8 .0 10.1 LEMHI RIGGE 8100 4/26/88 10 3.2 .8 7.0 COPPER MOUNTAIN 7700 4/25/88 20 5.9 .7 11.8 LEMHI RIGGE 8100 4/26/88 25 7.6 2.8 10.0 COTTONWOOD CREEK 6400 4/29/88 18 6.6 .0 8.4 LIGK CREEK PILLOW 6850 5/01/88 9.2 .8 10.0 COTTONWOOD CREEK 6400 4/25/88 0 .0 .0 3.3 LIGK CREEK FILLOW 6850 5/01/88 7.4 .0 8.0 COYDTE HILL 4200 4/25/88 25 10.8 .0 12.9 LITTLE PARK 7400 4/25/88 35 11.0 4.6 17.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LITTLE PARK 7400 4/25/88 35 11.0 4.6 17.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 2.9 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LIGAN CREEK 4300 4/26/88 0 .0 .0 .0 .0 2.9 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LIGAN CREEK 4300 4/26/88 0 .0 .0 .0 .0 2.0 2.0 2.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LIGAN CREEK 4300 4/26/88 0 .0 .0 .0 .0 2.0 2.0 2.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LIGAN CREEK 4300 4/26/88 0 .0 .0 .0 .0 2.0 2.0 2.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LIGAN CREEK 4300 4/26/88 0 .0 .0 .0 .0 2.0 2.0 2.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LIGAN CREEK 4300 4/26/88 0 .0 .0 .0 .0 2.0 2.0 2.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LIGAN CREEK 4300 4/26/88 0 .0 .0 .0 .0 2.0 2.0 2.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LIGAN CREEK 4300 4/26/88 0 .0 .0 .0 .0 2.0 2.0 2.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LIGAN CREEK 4300 4/26/88 0 .0 .0 .0 .0 2.0 2.0 2.0 2.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LIGAN CREEK 4300 4															15.1
COPPER BOTTOM 5200 4/27/88 3 1.0 .0 4.9 LAKE CREEK 6100 4/27/88 0 .0 .0 3.  COPPER BOTTOM PILLOW 5200 5/01/88 3.0 .0 6.8 LAKEVIEW CANYON 6930 5/01/88 0 .0 4.2 12.  COPPER CAMP PILLOW 6950 5/01/88 23.2 8.6 33.5 LAKEVIEW ROG. PILLOW 7400 5/01/88 0 .0 2.9 10.  COPPER CAMP 6950 4/27/88 48 21.4 13.5 30.6 LAKEVIEW RIGGE 7400 5/01/88 0 .0 2.9 10.  COPPER CREEK 5700 4/27/88 16 6.8 .0 10.1 LEMHI PASS 7480 4/26/88 10 3.2 .8 7.  COPPER MOUNTAIN 7700 4/25/88 20 5.9 .7 11.8 LEMHI RIGGE 8100 4/26/88 25 7.6 2.8 10.  COTTONWOOD CREEK 6400 4/29/88 18 6.6 .0 8.4 LICK CREEK PILLOW 8100 5/01/88 9.2 .8 10.  COYDTE HILL 4200 4/25/88 0 .0 .0 3.3 LICK CREEK PILLOW 6860 5/01/88 9.2 .8 10.  CRYSTAL LAKE 6050 4/28/88 25 10.8 .0 12.9 LITTLE PARK 7400 4/25/88 35 11.0 4.6 17.  CRYSTAL LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LITTLE PARK 7400 4/25/88 35 11.0 4.6 17.  COLOURS STATION 8150 5/01/88 9.0 .0 12.5 LOSAN CREEK 4300 4/28/88 0 .0 .0 .0 2.9															.3 4.0
COPPER BOTTOM 5200 4/27/88 3 1.0 .0 4.9  COPPER BOTTOM PILLOW 5200 5/01/88 3.0 .0 6.8  COPPER CAMP PILLOW 6950 5/01/88 23.2 8.6 33.5  COPPER CAMP 6950 4/27/88 48 2i.4 13.5 30.6  COPPER CREEK 5700 4/27/88 16 6.8 .0 10.1  COPPER MOUNTAIN 7700 4/25/88 20 5.9 .7 11.8  COPPER MOUNTAIN 7700 4/25/88 20 5.9 .7 11.8  COPPER MOUNTAIN 7700 4/25/88 20 5.9 .7 11.8  COPPER HILL 4200 4/25/88 0 .0 .0 3.3  COPPER HILL 4200 4/25/88 0 .0 .0 3.3  COPPER HILL 4200 4/25/88 25 10.8 .0 12.9  CRYSTAL LAKE 6050 4/28/88 25 10.8 .0 12.9  CRYSTAL LAKE PILLOW 6050 5/01/88 9.0 .0 12.5  CRYSTAL LAKE PILLOW 6050 5/01/88 9.0 .0 12.5  COPPER HAVE 8400 4/26/88 35 11.0 4.6 17.  COPPER HAVE 8400 4/26/88 41 13.1 11.8 17.2  COPPER HAVE 8400 4/26/88 0 .0 .0 .0 2.9  COPPER HAVE 8400 4/26/88 41 13.1 11.8 17.2						5.9	21.4								3.6
COPPER CAMP PILLOW 6950 5/01/88 23.2 8.6 33.5 LAKEVIEW RIGG. PILLOW 7400 5/01/88 2 .0 5.0 COPPER CAMP 6950 4/27/88 48 2i.4 13.5 30.6 LEMHI PASS 7480 4/26/88 10 3.2 .8 7.0 COPPER CREEK 5700 4/27/88 16 6.8 .0 10.1 LEMHI RIGGE 8100 4/26/88 25 7.6 2.8 10.0 COPPER MOUNTAIN 7700 4/25/88 20 5.9 .7 11.8 LEMHI RIGGE PILLOW 8100 5/01/88 9.2 .8 10.0 COTTONWOOD CREEK 6400 4/29/88 18 6.6 .0 8.4 LIGK CREEK PILLOW 6860 5/01/88 9.2 .8 10.0 COPPER HILL 4200 4/25/88 0 .0 .0 3.3 LIGK CREEK PILLOW 6860 5/01/88 7.4 .0 9.0 COPPER LAKE 6050 4/26/88 25 10.8 .0 12.9 LIGK CREEK 6860 4/26/88 33 10.2 2.4 10.0 COPPER LAKE PILLOW 6050 5/01/88 9.0 .0 12.9 LITTLE PARK 7400 4/25/88 35 11.0 4.6 17.0 COPPER LAKE PILLOW 6860 5/01/88 9.0 .0 12.5 LITTLE PARK 7400 4/25/88 35 11.0 4.6 17.0 COPPER LAKE 8400 4/26/88 41 13.1 11.8 17.2 LOSAN CREEK 4300 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 41 13.1 11.8 17.2 LOSAN CREEK 4300 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 41 13.1 11.8 17.2 LOSAN CREEK 4300 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 41 13.1 11.8 17.2 LOSAN CREEK 4300 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 41 13.1 11.8 17.2 LOSAN CREEK 4300 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8400 4/26/88 0 .0 .0 .0 2.0 2.0 10.0 COPPER LAKE 8									LAKEVIEW CANYON	6930	5/01/88		.0	4.2	12.3
COPPER CAMP 6950 4/27/88 48 2i.4 13.5 30.6 LEMHI PASS 7480 4/26/88 10 3.2 .8 7. COPPER CREEK 5700 4/27/88 16 6.8 .0 !0.1 LEMHI PASS 7480 4/26/88 25 7.6 2.8 !0. COPPER MOUNTAIN 7700 4/25/88 20 5.9 .7 !1.8 LEMHI RIDGE 8100 4/26/88 25 7.6 2.8 !0. COTTONNOOD CREEK 6400 4/29/88 18 6.6 .0 8.4 LICK CREEK PILLOW 8100 5/01/88 9.2 .8 !0. COYDTE HILL 4200 4/25/88 0 .0 .0 3.3 LICK CREEK PILLOW 6860 5/01/88 7.4 .0 9. CRYSTAL LAKE 6050 4/26/88 25 10.8 .0 !2.9 LICK CREEK 6860 4/26/88 33 10.2 2.4 !0. CRYSTAL LAKE PILLOW 6050 5/01/88 9.0 .0 !2.5 LITTLE PARK 7400 4/25/88 35 !1.0 4.6 !7. CRYSTAL LAKE PILLOW 6050 5/01/88 9.0 .0 !2.5 LITTLE PARK 7400 4/25/88 35 !1.0 4.6 !7. CRYSTAL LAKE 8400 4/26/88 41 13.1 !1.8 !7.2 LOSAN CREEK 4300 4/26/88 0 .0 .0 .0 2.6															9.6
COPPER CHEEK 5700 4/27/88 16 6.8 .0 10.1 LEMHI RIDGE 8100 4/26/88 25 7.6 2.8 :0.  COPPER MOUNTAIN 7700 4/25/88 20 5.9 .7 11.8 LEMHI RIDGE PILLOW 8100 5/01/88 9.2 .8 :0.  COTTONWOOD CREEK 6400 4/29/88 18 6.6 .0 8.4 LICK CREEK PILLOW 6860 5/01/88 7.4 .0 9.  COYDTE HILL 4200 4/25/88 0 .0 .0 3.3 LICK CREEK PILLOW 6860 4/26/88 33 10.2 2.4 :0.  CRYSTAL LAKE 6050 4/28/88 25 10.8 .0 12.9 LITTLE PARK 7400 4/25/88 35 11.0 4.6 :7.  CRYSTAL LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LITTLE PARK 7400 4/25/88 35 11.0 4.6 :7.  CROUNTER LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LITTLE PARK 7400 4/25/88 0 .0 .0 .0 2.0	COPPER CAMP	6950	4/27/88	48	21.4	13.5	30.6								10.3 7.2
COMPER MOUNTAIN 7/00 4/25/88 20 5.5 .7 11.8 LEMHI RIOGE PILLOW 8100 5/01/88 9.2 .8 :0.0															:0.0
COYDIE HILL 4200 4/25/88 0 .0 .0 3.3 LIGK CREEK PILLUM 6850 5/01/88 7.4 .0 5.  CRYSTAL LAKE 6050 4/28/88 25 10.8 .0 12.9 LIGK CREEK 6860 4/26/88 33 10.2 2.4 10.  CRYSTAL LAKE PILLUM 6050 5/01/88 9.0 .0 12.5 LITTLE PARK 7400 4/25/88 35 11.0 4.6 17.  OLD CRYSTAL LAKE 8400 4/26/88 41 13.1 11.8 17.2 LOGAN CREEK 4300 4/28/88 0 .0 .0 .0 2.									LEMHI RIOGE PILLOW	8100	5/01/88		9.2	.8	:0.5
CRYSTAL LAKE 6050 4/28/88 25 10.8 .0 12.9 LITTLE PARK 7400 4/25/88 35 11.0 4.6 17.  CRYSTAL LAKE PILLOW 6050 5/01/88 9.0 .0 12.5 LOSAN CREEK 4300 4/26/88 0 .0 .0 2.															8.6
CRYSTAL LAKE PILLUM 5050 5/01/88 9.0 .0 12.5  OLD CREEK LAKE 8400 4/26/88 41 13.1 11.8 17.2 LOGAN GREEK 4300 4/26/88 0 .0 .0 2.	CRYSTAL LAKE	6050	4/28/88		10.8	.0	12.9								:0.3 :7.8
100 000 000 000 00 00 000 000 000 000 0									LOGAN CREEK	4300	4/28/88	0	.0	.0	2.5
EGIZ (1004) A1/23/00 33 10,4 0,5 25.	UNU UNILEK DAKE	5700	7, 20, 00	41	13.1	11.0	11.2		LONE MOUNTAIN	8880	4/25/88	55	16.4	6.5	25.7

SNOW COURSE	ELEVATION			WATER CONTENT	LAST YEAR	AVERAGE 1961-85	
LOST HORSE	5940	5/01/88	 58	25.0	14.6	33.9	SKYLARK TRAIL PILL
LOST SOUL LOWER TWIN PILLOW LOWER TWIN	4800	4/24/88		2.4 16.1	.0	9.8	SLAG-A-MELT LAKE
LOWER TWIN PILLOW	7900	5/01/88		16.1	11.6	22.7	SLIDE ROCK MOUNTAL
LUMER IMIN	7900	4/29/88	42	17.3	8.2	25.2	SMUGGLER MINE
LOWER TWIN LUBRECHT FLUME LUBRECHT PILLOW	4680	5/02/88	U	.0	.0	.6	S.F. SHIELDS PILLU
LUBRECHT FOREST NO	3 5450	5/01/88 5/02/88	0	.0 .0 .0	.0	-4 3 G	SPOTTED BEAR MIN.
LUSPECHT FOREST NO		5/02/88	0	.0	.0	2.0	SPUR PARK PILLOW
LUBRECHT FOREST NO		5/02/88		.0	.0	.1	SPUR PARK
LUBRECHT HYOROPLOT		5/02/88	0	.0 20.1 20.0 8.0 .2 4.4	.0	.3	STAHL PEAK
MADISON PLT PILLOW	7750	4/27/88		20.1	7.4 2.5	24.3	STABLAKE E
MADISON PLATEAU MANY GLACIER	7/50 4000	4/27/88 4/28/88	48	20.0	2.5	23.2	STEMPLE PASS
MANY GLACTED DILLO	M 4000	5/01/88	20	8.0	.0	12.2	STORM LAKE
MARIAS PASS	5250	4/30/88	12	.2 4.4 12.2 9.1	5.2	16.0	STRYKER BASIN
MAYNARO CREEK	6210	4/27/88	38	12.2	.0	17.0	STUART MILL
MAYNARO CR PILLOW	6210	4/27/88		9.1	.0	13.1	STUART MOUNTAIN
MIOOLE MILL CREEK	7850	5/02/88	29	9.4	2.6	18.2	SULKER LREEK
MILL CREEK	7500	4/28/88 4/29/88	23 5	7.6	.0 2.6 .0	12.3	TEN MILE LOWER
MAPIAS PASS MAYNARO CREEK MAYNARO CR PILLOM MIOOLE MILL CREEK MILL CREEK MINERAL CREEK MONUMENT PK PILLOM	4000 8850	5/01/88		1.8 16.8	11.5	24.6	TEN MILE MIODLE
MONUMENT PEAK	8850	4/27/88	58	21.9	15.7	30.0	TEN MILE UPPER
MOSS PEAK	6780	4/29/88	60	31.2	32.6		TEPEE CREEK PILLOW
MONUMENT PEAK MOSS PEAK MOSS PEAK PILLOW MOULTON RESERVOIR MOUNT ALLEN NO 7 MT LOCKHART PILLOW	6780	5/01/88		31.2 26.8 2.3 29.9 18.1	28.1	48.I	TEPEE CREEK
MOULTON RESERVOIR	6850	5/04/88	8	2.3	.0	3.I	TOATL COFFY
MOUNT ALLEN NU /	5/00	4/26/88 5/01/88	72 	18.1	31.4 12.0	45.1	TRINKIS LAKE
MOUNT LOCKHART	6400	5/02/88	40	17.2	9.4	22.8	TRUMAN CREEK
MUOO LAKE	7650	4/27/88	38	17.2 15.4	4.8	20.4	TV MOUNTAIN
MULE CREEK	8300	4/28/88	42	14.8	7.8	16.0	TWELVEMILE PILLOW
MOUNT LOCKHART MUOO LAKE MULE CREEK MULE CREEK PILLOW NEVAOA CREEK	8300	5/01/88		14.8 15.2 8.7 1I.1	9.6	16.2	THENTY ONE WILE
NEVADA CREEK NEVADA CREEK PILLO	6480 H 6480	4/27/88 5/01/88	23	17.1	2.4	12.4	THIN CREEKS
NEWTON MOUNTAIN		4/27/88		24.6	18 3	13.0 36.8	TWIN LAKES PILLOW
NEZ PERCE CMP PILL	Oir 5650	5/01/88		10.7	1.8	10.6	THIN LAKES
NET PERCE CAMP	5650	4/29/88	19	9.0	1.0	12.7	UPPER HOLLAND LAKE
NEZ PERCE CREEK	6600	4/25/88	4	.4 9.2	.0	4.3	WALDRON PILLOW
NEZ PERCE CREEK NEZ PERCE PASS NO1SY BASIN NOISY BASIN PILLOW	6570	4/29/88		9.2	.0	15.5	WARM SPRINGS
NOISY BASIN DILLOW	6040 6040	4/24/88 5/01/88	75 	3I.0 29.1	26.3	52.5 46.7	WARM SPRINGS PILLOW
N.F. ELK CR PILLOW	6250	5/01/88		.6	.0	10.2	WEASEL DIVIDE
N.F. ELK CR PILLOW N.F. ELK CREEK NORTH FORK JOCKO NORTH MEADOW	6250	5/02/88	8	3.1	.0	10.I	WEST YELL'ST PILLO
NORTH FORK JOCKO	6330	4/29/88	63	30.6	21.1	46.6	WEST YELLOWSTONE
NORTH MEADOW	7500	4/29/88	15	4.3 1.6	.0	10.6	MHIOKEA COEEN MHIOKEA CKEEK BILLIO
N.E. ENTRANCE PILL	7350 7350	5/01/88 5/01/88	٨	.0	.0	7 N	WHITE MILL PILLOW
NORTHEAST ENTRANCE NOTCH	8500	4/27/88	39	9.6	9.3	20.0	WHITE MILL
OPHIR PARK	8500 7150	5/01/88	30	11.9	7.8	18.2	WHITE PINE RIOGE
PALISADE CREEK	8250	4/27/88	59	26.8	I1.2	32.8	WILLOW CREEK
PETERSON MOW PILLO		4/25/88		9.8	2.2	12.1	WOOO CREEK WOOO CREEK PILLOW
PETERSON MEADOWS PICKET PIN D	7200 9450	4/25/88 4/29/88	32 42	9.3 16.5	.6 18.5	11.6 28.8	WRONG CREEK
PICKFOOT CREEK	6650	4/25/88	13	3.2	.0	7. I	WRONG RIDGE
PICKFOOT CRK PILLO		5/01/88		2.4	.0	6.7	
PIEGAN PASS NO 6	5500	4/26/88	57	23.9	24.0	39.6	
PIKÉ CREÉK PILLOW	5930 7200	5/01/88 4/25/88	10	17.0 2.6	I3.1 .9	26.8 5.7	
PIPESTONE PASS PLACER BASIN F	8830	4/29/88	32	12.0	13.5	23.4	
PLACER BASIN PILLO		5/01/88		17.1	13.5	19.5	
POORMAN CREEK	5100	4/24/88	37	16.4	10.7	32.0	
PORCUPINE PILLOW	6500	5/01/88		.8	٥.	4.4	
PORCUPINE	6500 7150	4/29/88 4/25/88	7 3	2.9 .6	.0 .0	7.4 10.7	
POTOMAGETON PARK PTARMIGAN	5800	4/27/88	57	23.8	25.5	37.9	
RED MOUNTAIN	6000	4/29/88	27	9.9	8.5	18.6	
RED TOP	5260	4/27/88	38	15.8	7.5	29.6	
ROCK CREEK	5600	4/28/88	7	2.7	.0	6.2	
ROCK CREEK MEADOW ROCKER PEAK	8160 8000	4/28/88 4/27/88	49 38	17.7 12.7	10.6 4.2	24.7 17.0	
ROCKER PEAK PILLON		5/01/88		15.I	11.8	18.5	
ROCKY 80Y	4700	4/27/88	0	.0	.0	1.7	
ROCKY 80Y PILLOW	4700	4/27/88		.0	.0	2.9	
SACAJAWEA	6550	4/27/88	23	7.4	.0	14.3	
SADOLE MTN PILLOW	7900	5/01/88 4/29/88	50	20.1 22.2	8.8 12.5	29.1 28.6	
SADOLE MOUNTAIN SENTINEL CREEK	7940 8 <b>3</b> 00	4/25/88	49	16.5	4.0	26.0	
SHORT CREEK	7000	5/02/88	9	1.5	.1		
SHOWER FALLS	8100	4/26/88	60	20.4	13.9	29.0	
SHOWER FALLS PILLO		5/01/88		23.0	12.6	29.5	
SILVER RUN SILVER RUN PILLOW	6630 6630	4/27/88 5/01/88	5 	1.3 .9	.0 .0	3.8 1.4	
SKALKAHO PILLOW	7260	5/01/88		21.3	13.1	25.6	
SKALKAHO SUMM1T	7250	4/28/88	46	19.7	10.7	27.6	

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
SKYLARK TRAIL PILLOW	6200	5/01/88		26.7	10.8	34.0
SLAG-A-MELT LAKE	8750	4/26/88	60	19.7	11.1	29.0
SLIDE ROCK MOUNTAIN	7100	4/25/88	34	11.8	5.7	18.5
SMUGGLER MINE	6960	5/02/88	11	3.0	.6	9.9
S.F. SHIELDS PILLOW	8100	5/01/88		16.5	3.5	21.5
S.F. SHIELOS	8100	4/29/88		25.0	10.2	29.0
SPOTTEO BEAR MTN.	7000	4/27/88	6	2.4	.0	10.4
SPUR PARK PILLOW	8100	5/01/88		20.0 18.6 31.1	8.7	24.2
SPUR PARK	8100	4/28/88	48	18.6	4.0	24.I
STAHL PEAK	6030	4/24/88	76	31.1	36.2	44.2
STAHL PEAK PILLOW	6030	5/01/88		26.4	34.9	41.2
STAR LAKE E	9650	4/29/88		35.5	21.5	47.7
STEMPLE PASS	6600	4/27/88		7.1	3.0	11.1
STORM LAKE	7780	4/25/88		12.4	1.5	16.1
STRYKER BASIN	6180	4/26/88	54	19.5		37.1
STUART MILL	6500	4/26/88	2	.4	.0	
STUART MOUNTAIN	7400	4/29/88			16.1	33.9
SUCKER CREEK	3960	4/27/88	0	.0	.0	.4
TAYLOR ROAD	4080	4/27/88		.0	.0	.7
TEN MILE LOWER	6600	4/26/88		3.4	.0	6.2
TEN MILE LUMER TEN MILE HIPPER	6800	4/26/88		9.5	4.3	13.2
TEN TITLE OF LEN	8000	4/26/88		12.1	4.5	16.1
TEPEE CREEK PILLOW	8000	5/01/88		10.4	3.3	14.7
TEPEE CREEK	8000	4/27/88		11.0	7.8	17.6
TIMBERLINE CREEK	8850	4/28/88		13.8	10.0	18.7
TRAIL CREEK	7090	4/26/88	6	1.8	.0	7.5
TRINKUS LAKE	6100	4/27/88	65	29.8	20.6	45.2
TRUMAN CREEK	4060	4/28/88	0	.0	.0	.7
TV MOUNTAIN	6800	4/29/88 5/01/88	24	9.0	3.8	20.0
TWELVEMILE PILLOW	5600	5/01/88		2.6	.0	13.2
TWELVEMILE CREEK	5600	5/01/88		3.8	.0	16.0
TWENTY-ONE MILE	7150	4/30/88		7.0	.0	16.3
TWIN CREEKS	3580	4/27/88	0	.0	.0	2.3
TWIN LAKES PILLOW TWIN LAKES	6400	5/01/88		31.4	22.3	42.6
UPPER HOLLAND LAKE	6510	5/01/88		34.0	23.8	45.2
WALORON PILLOW	6200	4/27/88		26.8	13.9	36.7
WALDRON	5600 5600	5/01/88		3.7	.0	7.0
WARM SPRINGS	7800	5/02/88		.0	.0	5.5
WARM SPRINGS PILLOW	7800	4/28/88		14.5	6.8	22.0
WEASEL DIVIDE	5450	5/01/88 4/24/88		19.5	12.6	31.2
WEST YELL'ST PILLOW	6700	4/24/88		24.4	20.2	35.1
WEST YELLOWSTONE	6700	4/30/88		.0	.0	6.2
WHISKEY CREEK PILLOW	6800	5/01/88		.0	.0	8.0
WHISKEY CREEK	6800			10.6	2.9	15.7
WHITE MILL PILLOW	8700	4/27/88 5/01/88		10.7	.0	18.7
WHITE MILL	8700	5/02/88		19.9	12.9	27.9
WHITE PINE RIOGE	8850	4/26/88	10	23.9 2.0	13.2	30.5
WILLOW CREEK	6500	4/26/88 4/27/88	12	3.1	2.6	6.4
WOOD CREEK	5960	4/27/88	9	3.4	.0	5.4
WOOO CREEK PILLOW	5960	5/01/88		4.6	.0 1.2	7.5
WRONG CREEK	5700	5/01/88 4/26/88	14	4.8	.6	9.2 10.4
WRONG RIOGE	6800	4/26/88	34	13.1	8.7	19.6





#### ESTIMATES OF PEAK SNOWMELT RUNOFF

	Peak Day	1961-85 Avg.
	Range in cfs	cfs
COLUMBIA RIVER		
Blackfoot River near Bonner	4,000 - 7,000	9,588
Clark Fork River above Missoula	7,000 - 12,000	16,738
Bitterroot River near Darby	4,000 - 6,000	6,229
Clark Fork River below Missoula	17,000 - 27,000	31,992
Clark Fork River at St. Regis	22,000 - 35,000	39,984
N. Fk. Flathead near Columbia Falls	10,000 - 16,000	21,189
M. Fk. Flathead near West Glacier	9,000 - 15,000	22,463
MISSOURI RIVER DRAINAGE		
Rig Holo Pivor poor Molroso	4,000 - 6,500	8,015
Big Hole River near Melrose Ruby River above Reservoir	450 - 800	1,037
Gallatin River near Gateway	3,000 - 4,200	5,389
Gallatin River near Logan	2,500 - 4,500	5,581
Missouri River at Toston	11,000 - 17,000	19,042
Marias River near Shelby	3,000 - 6,000	11,516
S. Fk. Musselshell above Martinsdale	400 - 600	1,229
YELLOWSTONE RIVER DRAINAGE		
Valleyatana Diwar at Carrin Caringa	7 000 12 000	17 522
Yellowstone River at Corwin Springs Yellowstone River at Livingston	7,000 - 13,000 10,000 - 15,000	17,532 20,732
Boulder River near Big Timber	3,500 - 5,000	5,226
Stillwater River near Absarokee	4,000 - 6,000	6,601
Clarks Fork River near Belfry	4,500 - 6,500	7,706
Yellowstone River at Billings	25,000 - 35,000	42,716

# The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

Canadian

Department of the Environment

Atmospheric Environment Service

Water Management Service

British Columbia Ministry of Environment

Inventory and Engineering Branch, Hydrology Section

Alberta Environment

**Technical Services Division** 

**Federal** 

U.S. Department of Agriculture

Forest Service

U.S. Department of the Army

Corps of Engineers

U.S. Department of Commerce

NOAA, National Weather Service

National Environmental Satellite Service

U.S. Department of the Interior

Bureau of Indian Affairs

Fish and Wildlife Service

Geological Survey

National Park Service

Bureau of Reclamation

U.S. Department of Energy

Bonneville Power Administration

State

Montana Conservation Districts

Montana Department of Fish, Wildlife, and Parks

Montana Department of Natural Resources and Conservation

Montana Department of State Lands

Montana State University - Agricultural Experiment Station

University of Montana - School of Forestry

**Private** 

Big Sky of Montana

**Butte Water Company** 

Confererated Salish & Kootenai Tribes Flathead Valley Comminity College

Montana Power Company

Pondera County Canal & Reservoir Company

Other organizations and individuals furnish information for the snow survey reports.

Their cooperation is gratefully acknowledged.

#### UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT

Federal Bldg., Rm. 443 10 East Babcock Street Bozeman, MT 59715

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